DOCUMENT RESUME

ED 069 566 SO 002 738

TITLE	Latin America: Introduction and Summary. Grade Five (Unit 7). Resource Unit. Project Social Studies.
INSTITUTION	Minnesota Univ., Minneapolis. Project Social Studies Curriculum Center.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	[70]
NOTE	372p.
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	*Area Studies; Case Studies; City Problems; Concept Teaching; Cross Cultural Studies; Curriculum Guides; Elementary Grades; *Geographic Concepts; *Geographic Regions; Geography Instruction; Grade 5; *Human Geography; Inquiry Training; Latin American Culture; Map Skills; Population Distribution; Resource Units; Sequential Programs; *Social Studies Units; Urban Studies
IDENTIFIERS	*Project Social Studies

ABSTRACT

The last of three main parts designed for fifth grade students, resource unit seven provides an overview of patterns of Latin America and a system of regionalization for the total area on the basis of population composition. Following the overview, a series of case studies arranged in separate sub-units on Buenos Aires, Manaus, Sao Paulo, Chile, and Cuzco illustrate different population compositions and other regional differences. After completing the case studies students turn to culminating procedures on Latin America as a whole and, further, generalize previously learned concepts to the entire course. The teacher's guide provides program descriptions, course objectives, teaching strategies, and an explanation of format in ED 062 226. Other related documents are ED 061 134, ED 062 227, and SO 002 732 through SO 002 741. (Several pages may be illegible.) (Author/SJM)

ED 069566

SO 002 738

167

C1

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

Grade Five
Unit VII: LATIN AMERICA: INTRODUCTION AND SUMMARY

RESOURCE UNIT

These materials were developed by the Project Social Studies Curriculum Center of the University of Minnesota under a special contract with the Cooperative Research Division of the United States Office of Education. (Project HS-045).

FILMED FROM BEST AVAILABLE COPY

INTRODUCTION

Latin America is introduced with a general overview of population distribution, topography, climatic features, and population composition. Pupils then look at a possible regionalization of Latin America on the basis of population composition which has affected culture regions.

Following the overview, the class should turn to individual case studies which illustrate these different regions as well as other differences within Latin America. Buenos Aires serves as a case study of a region populated primarily by people of European descent as well as a rich agricultural region. Manaus serves as a case study of a tropical forest region populated largely by Non-Andean Indians, with white people dominating the economy. Sao Paulo presents a case study of the most rapidly growing city in Latin America--a city of mixed population, with a large percentage of Negroes. The city received much of its impetus for growth from the coffee plantations in the hinterland. The case study on Chile illustrates a country with three markedly different physical regions and a predominantly mestizo culture. Cuzco, on the other hand, presents a case study of the Andean Indian culture.

Preferably, the class will study most of these case studies. If pupils have come through the Center's first grade course, they can omit the case study on Cuzco, or at least study it very briefly. Some teachers may wish to divide the case studies up among different groups. If so, they should develop study sheets requiring pupils to study maps, set up hypotheses, and then check their hypotheses against data rather than just reading textbook accounts and other references. If time is a problem, it would probably be more to the point to select only two of the case studies and omit the others. If this is done, one should probably be Manaus. The other should be either Sao Paulo or Buenos Aires. Sao Paulo might be preferable because it provides pupils with information about a completely different crop than one which they have studied in the past. However, Buenos Aires would provide for a depth study of at least one other large country in Latin America.

Once the class has completed the case studies, the teacher should use some of the culminating activities for Latin America as a whole and for the entire course. These are included at the end of this introductory section on Latin America.

OBJECTIVES

GENERALIZATIONS

1. Phenomena are distributed unevenly over the earth's surface, resulting in great diversity or variability from one place to another.
   - a. Unevenly-distributed pehnomena form distinctive patterns on the map.
   - b. Maps make it possible to discern patterns and relationships among a vast amount of data.
2. A region is an area which has some degree of internal unity or homogeneity and which differs in significant respects from adjoining areas.
   - a. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.
   - b. Regions are delimited on many different bases, depending upon the purpose of the study. Some are delimited on the basis of a single phenomenon, some on the basis of multiple phenomena, and some on the basis of functional relationships.

3. Tempera
from th
warm wa
sical f
tain di

   a. Tempe
   vatio
   tions
   tude
   same.

   b. Tempe
   affec
   equat
   near
   it.

   c. Place
   to ha
   than

4. Rainfall
of water
sical fe
moisture

5. Man uses
of his c
levels o

   a. The t
   limita
   techno

OBJECTIVES

unevenly over
ting in great-
y from one

hnomena form
the map.

o discern pat-
among a vast

has some degree
eneity and which
pects from ad-

one or more
The core area
but there are
boundaries
rent regions.

n many differ-
on the purpose
delimited on
henomenon, some
e phenomena,
f functional

3. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, physical features which block winds from certain directions, ocean currents, etc.
   a. Temperature is affected in part by elevation; air is cooler at higher elevations than at lower elevations if latitude and distance from the sea are the same.
   b. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.
   c. Places in the interior of continents tend to have greater extremes of temperature than places along the coast.
4. Rainfall is affected by distance from bodies of water, wind direction, temperature, physical features which block winds carrying moisture, and ocean currents.
5. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.
   a. The topography of an area may present limitations given a specific level of technology.

b. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement and growth patterns.

   1) Men carry on more activities on plains than in hills and more in hills than in mountains except in the low latitudes where climate at lower elevations leads people to seek cooler areas in the highlands.

   2) Relatively moist areas tend to have a higher population density than dry areas, although too much moisture may lead to low population densities. Population distribution reflects man's values and his technology as well as physical features of an area.

6. The nations of the world are interdependent.

7. Ways of living differ from one society to another.

8. When people migrate from one place to another, they carry with them material objects and culture.

9. Geographers seek information about areas on the earth's surface which enables them to compare, synthesize, and generalize about these areas.

a. Geogr
place
the m

ATTITUDES

1. Is scept
consider
change i

2. Is curio

SKILLS

1. Sets up

2. Interpret

3. Interpret

4. Reads rap

5. Gains inf

6. Interpret
legend.

7. Draws inf
different

8. Draws inf

9. Develops
ticular p

10. Applies p
eralizati

climate, sur-
resources,
ory -- affect
atterns.

tivities on
and more in
ins except in
ere climate
leads people
in the high-

as tend to have
density than
too much mois-
population
on distribution
and his tech-
sical features

re interdepen-

one society

e place to
hem material

on about areas
h enables
, and general-

a. Geographers ask different questions about places, depending upon their purposes at the moment.

ATTITUDES

1. Is sceptical of the finality of knowledge; considers theories tentative, subject to change in the light of new evidence.

2. Is curious about social data.

SKILLS

1. Sets up hypotheses.

2. Interprets tables.

3. Interprets line graphs.

4. Reads rapidly for main ideas.

5. Gains information by studying films.

6. Interprets map symbols in terms of map legend.

7. Draws inferences from a comparison of different map patterns of the same area.

8. Draws inferences from maps and pictures.

9. Develops a system of regions to fit a particular purpose.

10. Applies previously-known concepts and generalizations to new data.

11. Tests hypothese against data.

12. Generalizes from data.

OBJECTIVES OUTL

G. Phenomena are distributed unevenly over the earth's surface, resulting in great diversity or variability from one place to another.

I. L
t
o
t

A IS CURIOUS ABOUT SOCIAL DATA.

G A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries

OUTLINE OF CONTENT

I. Latin America is an area of great diversity, even though people have come to think of it as a region on the basis of the Latin influence in the area and the general physical delineation of the land.

---

ributed unevenly
urface, resulting
y or variability
another.

OCIAL DATA.

of one or more
s. The core area
us, but there are
where boundaries

TEACHING PROCEDURES

Initiatory Activities

1. You may wish to do one or more of the following:
   a. Prepare a bulletin board display depicting the contrasting physical features, climatic types, and especially the different peoples of Latin America.
   b. Play a recording or tape of authentic Latin American music.
   c. Display a wide variety of books that students may use in their work.
   d. Give a pretest to determine prior knowledge students may have about the climate, the people and the products of South America. Go over the pretest and point out any misconceptions that may be held widely. This test may help in planning specific activities in the unit.
   e. A guest speaker who has been to Latin America or who is an expert on some phase of Latin American life would be valuable and interesting.
   f. Have students watch the newspapers and magazines for articles of interest on Latin America. Suggest they keep a scrapbook of articles and pictures based on a specific theme -- such as, Indians of South America, Ranching on the Pampas, Life in the Amazon region, or others of interest.
2. Discuss: What have you learned about the meaning of region so far in this course? Is there any single basis for the drawing of regional boundaries? Explain. What approac

r more of the following:

ird display depicting the con- tures, climatic types, and espe- peoples of Latin America.

ape of authentic Latin American

y of books that students may use

ermine prior knowledge students imate, the people and the prod- a. Go over the pretest and point s that may be held widely. This ning specific activities in the

as been to Latin America or who phase of Latin American life interesting.

ne newspapers and magazines for on Latin America. Suggest they ticles and pictures based on a as, Indians of South America, , Life in the Amazon region, or

earned about the meaning of re- e? Is there any single basis for oundaries? Explain. What approaches

MATERIALS

Tape of Latin American music.
Or Folkways Records.

are drawn between different regions.

G. Regions are delimited on many different bases, depending upon the purpose of the study. Some are delimited on the basis of a single phenomenon, some on the basis of multiple phenomena, and some on the basis of functional relationships.

A. IS CURIOUS ABOUT SOCIAL DATA.

S. Reads rapidly for main ideas.

might we take in trying to identify regions in Latin America? Suggest that pupils should try to regionalize the area on the basis of several criteria during the next few days and try to decide which criterion or criteria they think best. Also tell the class that social scientists differ as to whether they are willing to call Latin America a region of the world. Ask: Why do you think it may have been called a region and studied separately in the past? (Let pupils make suggestions to discuss in more detail later.) Suggest that pupils try to decide during the course of the unit, whether or not they think Latin America should be set apart as a region.

3. Give an overview of the unit by discussing some of the major topics to be studied. Stress the many contrasting ways of life in the continent.

   Have a variety of textbooks in the room to allow students to skim rapidly the topics to be presented in the unit. Stress rapid reading techniques for this assignment.

   Based on the rapid reading exercise and the introductory discussion, have the students prepare a list of four or five possible topics they would prefer to work on individually or in groups as a major assignment.

4. If this has not been done in earlier units, take the class to the school library and make sure that students understand the card catalogue system and are aware of other reference material available on Latin America.

S. Takes effective notes on reading and discussions.

S. Interprets map symbols.

S. Interprets tables.

S. Interprets line graphs.

S. Sets up hypotheses.

S. Sets up hypotheses.

G. Unevenly-distributed phenomena form distinctive patterns on the map.

II. Latin A
low pop
ulation
lated f
ever, p
America

A. In ge
thoug

B. Popul
rapid

C. Latin
settl
socia

1. Cl
fo

on reading

II. Latin American countries are marked in general by low population densities and a clustering of population densities at certain places which are isolated from each other by areas of low density. However, population is growing more rapidly in Latin America than in any other region of the world.

A. In general, population densities are low, although this is not true in all countries.

B. Population in Latin America is growing more rapidly than in any other part of the world.

C. Latin America's population pattern of clustered settlement presents a unique set of economic, social, and political problems.

enomena
ns on the

1. Clustering is the preferential way of living for nearly all societies on earth.

Developmental Activities

5. Ask pupils to read an introductory section on Latin America and to take notes on pertinent details. Follow this by presenting a good example of note-taking technique on the chalkboard for this same section. Stress the importance of note-taking during both reading and discussion periods.

6. Project a world map of population density. Ask: How does Latin America's population density compare with that in other areas of the world? Give pupils a table making a similar comparison for further checking.

   Give pupils a table comparing different Latin American countries as to population densities. Ask: Does the general rule of low population density hold true in all countries? Which countries are most populated? least populated?

7. Prepare a line graph or have a pupil prepare such a graph to compare population growth since 1900 in Latin America, the United States, and some other parts of the world. Ask: Which of the places shown here is growing most rapidly? Why might this cause problems?

8. Have pupils note a map showing the population distribution within Latin America. Ask: How evenly are the people scattered over the land? What might account for the way in which the people are scattered? Compare this map with a map showing the population distribution in the U.S. What differences do pupils not between the two? Be sure that pupils understand the meaning of the terms "clustering" and "peripheral." Review the values of

Wo
(e
To
wo
of
(e
Th
Wo

Po
Am
Wo
po
an
mo

roductory section on Latin Amer-
ertinent details. Follow this
ble of note-taking technique on
ame section. Stress the impor-
ng both reading and discussion

ulation density. Ask: How
ation density compare with
world? Give pupils a table
n for further checking.

ing different Latin American
densities. Ask: Does the
tion density hold true in all
s are most populated? least

World map of population density (e.g. Kohn and Drummond, World Today, pp. 14-15). Table of world population densities and of Latin American densities (e.g. Wheeler and Kostbade and Thoman, Reg. Geog. of the World, pp. 488-489).

ve a pupil prepare such a
n growth since 1900 in Latin
, and some other parts of the
places shown here is growing
his cause problems?

showing the population distri-
a. Ask: How evenly are the
land? What might account for
e are scattered? Compare this
population distribution in the
pupils not between the two?
tand the meaning of the terms
al." Review the values of

Population density map of Latin America (e.g. Deasy, et.al., World's Nations, p. 199. For pop. map (using dots) of Am. and Lat Am., see Kohn and Drummond, World Today, p. 14.

G. Maps make it possible to discern patterns and relationships among a vast amount of data.

G. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement and growth patterns.

S. Draws inferences from maps.

S. Sets up hypotheses.

S. Tests hypotheses against data.

S. Draws inferences from a comparison of different map patterns of the same area.

S. Sets up hypotheses.

a.

b.

2. Wi
wa

a.

b.

c.

3. Ge
ar

4. A s
nec
ar

le to discern
onships among
ta.

-- climate,
atural re-
ity, and his-
lement and

om maps.

ainst data.

om a comparison
tterns of the

a. Early in the history of North America and Europe, similar clustering patterns were evident.

b. South America today exhibits population clusters which tend to remain generally distinct from one another.

2. Within the population clusters there is always found an urban node or center.

   a. There is little overlap between the territory served by adjacent centers.

   b. Economic, social, and political life of a region commonly focuses on only one large central city.

   c. Lines of transportation and communication reflect this centralized focus.

3. Generally, political boundaries pass through areas of sparse population.

4. A significant aspect of clustering is the necessity to recognize two kinds of political areas.

maps for making such patterns clear.

Explain that similar clustering took place in early periods of U.S. history. Perhaps demonstrate with maps. Show a series of population maps of U.S. and ask pupils what has happened to these clusters in many parts of the country? Ask: Why do you think people tend to cluster together in this way? Why do you think the boundaries between clusters became less distinct in many parts of the U.S.?

9. Have pupils identify urban nodes of each general clustering area in Latin America by examining larger scale maps or by using an overlay map showing the locations of major cities. Ask: What do you notice about the number of urban nodes or centers for most of these clusters?

   Ask: To what degree do you think that these centers will serve the people of other population clusters or centers in Latin America? Review the way in which some U.S. cities which they have studied have served many population centers as well as their own hinterlands.

   Ask: How might we use maps to test our hypotheses? Project transportation maps to check quickly on guesses made. However, suggest that pupils keep their hypotheses in mind as they study the rest of the unit. They should look for further data to test them as they study.

10. Have a pupil trace national boundaries on a piece of acetate which has been placed over a population density map. Ask: What do you notice about how the boundaries run? Do most of them run through areas of clustering of population or through peripheral areas of light population? Why do you think this may be important?

rns clear.	
ering took place in early per- aps demonstrate with maps. maps of U.S. and ask pupils clusters in many parts of you think people tend to y? Why do you think the became less distinct in	Hist. atlas maps on population densities in U.S. over time. See Lord and Lord, *Hist. Atlas of the U.S.*
nodes of each general clusterin y examining larger scale maps showing the locations of major notice about the number of ur- st of these clusters?	e.g. Saveland and Glendinning, *World Resources, Western Hemisphere*, pp. 159, 165. Deasy, et.al., *World's Nations*, p. 200.
think that these centers will opulation clusters or centers he way in which some U.S. cit- have served many population n hinterlands.	For portional maps see, James, *Lat. Am.*, pp. 53-54. Saveland and Glendinning, *World Resources, Western Hemisphere*, p. 207. Lindop, *Understanding Lat. Am.*, p. 241. For a highway map, see Lindop, p. 240.
to test our hypotheses? Pro- check quickly on guesses made. s keep their hypotheses in of the unit. They should st them as they study.	
boundaries on a piece of ed over a population density ice about how the boundaries hrough areas of clustering of heral areas of light popula- s may be important?	For Population map, see above.

S. Generalizes from data.

S. Draws inferences from a comparison of different map patterns of the same area.

S. Sets up hypotheses.

G. The topography of an area may present limitations given a specific level of technology.

S. Draws inferences from a comparison of different maps or patterns of the same area.

b

5. A
c

a

b

III. Diversi
types c
complex

A. Lati
full
have
tion

1. T

om data.

es from a compari-
nt map patterns of

eses.

of an area may pre-
ns given a specific
ology.

es from a comparison
aps or patterns of

a. The "total national territory" over which a politically organized group claims jurisdiction -- the area within the national boundaries.

b. The "effective national territory" -- that part which actually contributes to the economic support of the country.

5. Another result of clustering is the problem of transportation which South America faces.

a. Efficient transportation networks have not been built because of the lack of an economical trade basis.

b. The chief lines of connection between settlement clusters are still the ocean routes.

III. Diversity in physical features and in climatic types characterize Latin American and add to its complexity.

A. Latin America's physical diversity presents the full range of possibilities; physical features have had some effects upon population distribution.

1. The Andes of western South America extend nearly the entire length of the continent.

Discuss: What types of problems would this ty
settlement pattern present to the people of So
ica? Let pupils set up hypotheses.

11. Have pupils prepare a map of Latin America sho
major land transportation routes. Have them w
short comparison of this pattern with that of
States. Or have one student prepare a map and
it. Then ask each pupil to write the comparis

12. Have students compare transportation patterns
showing density of population. What possible
ships do they see between these two distributi
pupils keep all maps that they prepare in a fo
the end of the unit they will have assembled a
"atlas" of South America.)

13. Show students a physical-political map of Lati
and ask them to discuss the major features the
What difficulties might arise in transportatio
these physical features?

Have pupils compare the physical features of So
ica with those of North America. What do they

of problems would this type of esent to the people of South Amer- up hypotheses.	
map of Latin America showing the tion routes. Have them write a his pattern with that of the United student prepare a map and project pil to write the comparison.	e.g. See James, Lat. Am., p. 53 (railroad map), p. 54 (road map). Lindop, Understanding Latin Am., p. 241 (railroad), p. 240 (road).
transportation patterns with a map pulation. What possible relation- ween these two distributions? (Have that they prepare in a folder. At hey will have assembled a useful ica.)	See maps above.
cal-political map of Latin America ss the major features they see. Ask: ht arise in transportation, given es? he physical features of South Amer- th America. What do they notice?	Physical-political map of Latin America (e.g. See James, Lat. Am., pp. 25,26 for physical map). Borchert and McGuigan, Geog. of the New World, pp. 378-379, 402-403. Lindop, Understanding Lat. Am., pp. 210, 130, 109, 15.

S. Tests hypotheses against data.

G. The topography of an area may present limitations given a specific level of technology.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Men carry on more activities on plains than in hills and more in hills than in mountains except in the low latitudes where climate at lower elevations leads people to seek cooler areas in the highlands.

against data.

f an area may pre-
given a specific
ogy.

es.

against data.

e activities on
ills and more in
untains except in
s where climate
ons leads people
reas in the high-

a. This system has proved to be a hindrance to transportation between the population clusters on either side.

b. Yet, the highlands of this system have been the homelands of numerous Indian cultures for centuries.

2. The Amazon, the third longest river of the world, is navigable for 2300 miles from its mouth.

   a. However, the region known as the Amazon basin has one of the lowest population densities in all of South America.

14. Use a physical-political map and a transportation map to illustrate transportation difficulties in South America. Point out the locations of Lima and Iquitos, both in Peru Give pupils a problem: A manufacturer of machinery in Lima wants to ship a large order of his product to a customer in Iquitos. Since the products are too bulky for air shipment, what surface route would be the most appropriate? Solution: Due to the lack of transportation facilities over the Andes, the only route remaining is by ocean through the Panama Canal and 2300 miles up the Amazon River.

15. Read aloud quotations from books which describe the difficulties of either: (1) building roads or railroads over the Andes,or (2) traveling on such roads, or (3) the cost of transportation on such roads.

16. Project photos of the Andes. Then project photos of the Amazon River basin and tell pupils about how far up the river ships can go. Ask: What differences do you note in these two areas? (Have pupils think of as many as they can.) Which would you think would support the greater population? Why?

    Now have pupils look at population density maps and identify the Andes highlands and the Amazon basin. Let them set up hypotheses, if they have not done so already, about why population densities are higher in the highlands of the Andes than in the Amazon basin.

and a transportation map to
fficulties in South America.
ima and Iquitos, both in Peru.
nufacturer of machinery in
rder of his product to a cus-
products are too bulky for
oute would be the most appro-
he lack of transportation fa-
e only route remaining is by
al and 2300 miles up the Ama-

Physical-political map of
South America.

ooks which describe the diffi-
ding roads or railroads over
n such roads, or (3) the cost
ads.

Then project photos of the
pupils about how far up the
hat differences do you note
upils think of as many as
think would support the

Photos of Andes and of Amazon
River basin.
See maps listed above.

lation density maps and i-
and the Amazon basin. Let
hey have not done so already,
es are higher in the high-
he Amazon basin.

S. Draws inferences from maps and pictures. 3

S. Sets up hypotheses.

S. Tests hypotheses against data.

S. Sets up hypotheses. 4

S. Tests hypotheses against data.

G. Relatively moist areas tend to have a higher population density than dry areas, although too much moisture may lead to low population densities. Population distribution reflects man's values and his technology as well as physical features of an area.

S. Sets up hypotheses. 5.

S. Tests hypotheses against data.

from maps and pic-

es.

against data.

s.

against data.

areas tend to have
on density than dry
oo much moisture
opulation densities.
bution reflects man's
chnology as well as
of an area.

s.

against data.

---

b. This area is relatively uninhabited because there has been no economic or social impetus to populate it permanently.

3. The coast of Chile affords a good example of physical diversity.

   a. The northern one-third is one of the dries deserts anywhere.

   b. The middle one-third is a transition to a mediterranean climate.

   c. The southern one-third presents a marine environment of evergreen forest and heavy rainfall.

4. Argentina presents another set of contrasting physical regions.

   a. Northern Argentina contains a region of hot, humid forests.

   b. South of the Rio Colorado is the region of Patagonia which is a cool, dry, and windswept region.

   c. In the east-central part of Argentina ther is an economically productive region known as the humid pampa.

5. Mexico and the Central American countries have diverse physical features.

17. Project a physical map of Chile and show pupils photos of each region. Ask: What can you tell about the climate of each region from these photos? About the physical relief? How do the three regions differ? Where would you expect to find the highest population densities? Why? Now have pupils check their hypotheses against an actual map of population density.

Ph
La
ea
Po
in

18. Now have pupils examine a physical map of Argentina and look for differences in physical relief and elevation. What would they expect to find true about the temperature and precipitation in each region? Why? Have pupils check during the next unit on Buenos Aires. Where would pupils expect to find the highest population densities in Argentina? Why? Have pupils check against a population map.

Ph
ma
La

19. Project a physical map of Mexico and Central America and have pupils note the diverse physical features. Ask: Where would you expect to find the highest population densities? Why? Have pupils check their hypotheses against a population map.

Ph
si
me
pp

and show pupils photos you tell about the cli- photos? About the physi- egions differ? Where ghest population densi- eck their hypotheses a- on density.	Physical map of Chile in James, Lat. Am., p. 241. Photos of each region. See unit on Chile Population density map of Chile in James, p. 67.
al map of Argentina and relief and elevation. rue about the tempera- egion? Why? Have pu- on Buenos Aires. Where highest population den- pupils check against a	Physical and population density maps of Argentina in James, Latin America, pp. 237, 67.
and Central America and sical features. Ask: he highest population eck their hypotheses	Physical map and population density maps of Mexico and C. America in James, Lat. Am., pp. 26, 638.

S. Sets up hypotheses.

S. Figures out ways of testing hypotheses.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Temperature is affected in part by elevation; air is cooler at higher elevations than at lower elevations if latitude and distance from the sea are the same.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, physical features which block winds from certain directions, ocean currents, etc.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Rainfall is affected by distance from bodies of water, wind direction, temperature, physical features which block winds carrying moisture, and ocean currents.

B. The cl
anothe

ng hy-

data.

n part by
at higher
elevations
from the

y the dis-
levation,
bodies,
l features
rtain di-
etc.

data.

istance
d direc-
al fea-
arrying
nts.

B. The climatic regions in Latin America present another great range of diversity.

20. Now ask pupils to summarize any relationships they have found between physical features and population densities. Can they develop one generalization, or are there differing conclusions for different areas? If so, what might account for these differences? Suggest pupils check as they go along, but they should decide now what kinds of evidence they might collect to check on their guesses.

21. Project an overlay of wind directions on top of a map showing the physical features of Latin America. Ask: What would you expect to find about temperatures in the different parts of Latin America? Have pupils make guesses and record them in chart form. Let them do this in a very general way first, and then ask what they think might be true about variations in temperature in these places from one time of year to another. Again record their guesses. Now have pupils check their guesses against temperature maps and charts.

Fo
se
Fo
ma
pp

22. Use a similar device to have pupils set up hypotheses about precipitation in the different parts of Latin America, including possible variations from one time of the year to another. Now have pupils check their guesses against rainfall maps and charts.

ize any relationships they have
eatures and population densities.
eralization, or are there differ-
erent areas? If so, what might
ences? Suggest pupils check as
should decide now what kinds of
ect to check on their guesses.

nd directions on top of a map
tures of Latin America. Ask:
find about temperatures in the
America? Have pupils make
in chart form. Let them do this
rst, and then ask what they
t variations in temperature in
e of year to another. Again re-
have pupils check their guesses
and charts.

For map of wind directions, see James, Lat. Am., p. 43. For Jan. and July temperature maps of S. Am., see James, pp. 30-31.

have pupils set up hypotheses
he different parts of Latin
ble variations from one time
Now have pupils check their
maps and charts.

G. A region is an area which has some degree of internal unity or homogeneity and which differs in significant respects from adjoining areas.

S. Develops a system of regions to fit a particular purpose.

S. Draws inferences from a comparison of different map patterns of the same area.

1.

A. SCEPTICISM OF SINGLE-FACTOR CAUSATION IN THE SOCIAL SCIENCES.

G. Men carry on more activities on plains than in hills and more in hills than in mountains except in the low latitudes where climate at lower elevations leads people to seek cooler areas in the highlands.

G. Relatively moist areas tend to have a higher population density than dry areas, although too much moisture may lead to low population densities. Population distribution reflects man's values and his technology as well as physical features of an area.

has some
r homo-
in sig-
oining

ns to

mparison
of the same

R CAUSA-
S.

es on
ore in
cept
climate
people
e high-

to have
y than
ch mois-
ation
tribu-
and his
ical

1. The middle and high latitude climates of South America may be compared with those of North America.

23. Have pupils superimpose a rainfall map upon a temperature map. Ask: Using these two criteria combined, what differences do you note in climate? Let pupils list different types of climate. Now have them try to regionalize Latin America according to these criteria. Let them check their maps against climatic maps made by professionals.

Display a series of pictures characteristic of each of these climatic types.

24. Have pupils compare climatic maps with population density maps. Ask: What do you notice? Do these climatic maps help explain some of the things which puzzled you when you tried to relate population patterns to relief and elevation? Why or why not? (It is important that pupils understand that no single physical, climatic, or economic pattern influences where people live. However, the geographer may use combinations of selected distributions in compiling regions. Have a discussion on these important ideas.)

a rainfall map upon a temperature two criteria combined, what dif- climate? Let pupils list dif- . Now have them try to regional- ding to these criteria. Let them t climatic maps made by profession-	For rainfall maps, see James, Lat. Am., pp. 40-42. Deasy, et.al., p. 197. For a climatic maps, see James, pp. 35-37.
tures characteristic of each of	Photos illustrating different climatic types in Latin America.
imatic maps with population den- do you notice? Do these climatic of the things which puzzled you e population patterns to relief why not? (It is important that no single physical, climatic, or nces where people live. However, combinations of selected distri- gions. Have a discussion on these	See above for climatic maps and population density maps of L. America.

S. Generalizes from data.

G. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.

S. Generalizes from data.

S. Generalizes from data.

S. Applies previously-known concepts and generalizations to new data.

2. Beca
hig
temp
are
Fueg
equa
degr
of

3. Ther
most
tren

a. T

e

b. O
i

4. The
Amer
Amer

a.

b.

c. S
Na

al differ-
part by
tor; temp-
ller near
er away from

wn concepts
new data.

2. Because South America has l[illegible] land in the higher latitudes, the great extremes of temperature range are not found here as they are in North America. However, Tierra del Fuego, more than fifty degrees south of the equator, has an annual temperature above 32 degrees in the coldest month and an average of below 50 degrees in the warmest month.

3. There is a general misunderstanding among most people concerning the temperature extremes in terms of heat in South America.

   a. There are no parts of South America where more than fifteen days [illegible] hottest month exceed 110 degrees.

   b. Only northern Argentina [illegible] in South America has temperatures exceeding 110 degrees.

4. The sequence of west coast climates in South America is similar to those found in North America.

   a. Cool, rainy climates of Southern Chile correspond to those in southern Alaska and British Columbia.

   b. Middle Chile, like coastal California, has a mediterranean type climate.

   c. Southern California and Mexico, like Northern Chile, contain deserts.

25. Have students make a comparison between the climatic types and yearly temperature ranges of South America and North America. Be sure that they understand the reversal of seasons in the southern hemisphere.

26. Have pupils examine charts and maps of temperature in summer months. Can they find any places where temperatures exceed 110 degrees? How large an area is this? How long do such temperatures last? Show pupils James' map on the frequency of hot days.

27. With a transparency projector, show the country of Chile (north at the top) superimposed on a map of the North American west coast (south at the top). A comparison can then be made of the similarity of west coast climates between these two areas. Ask: How can you explain this similarity?

comparison between the climatic erature ranges of South America e sure that they understand the n the southern hemisphere.	Climatic charts of S. America and N. America.
charts and maps of temperature in hey find any places where temperarees? How large an area is this? eratures last? Show pupils James' of hot days.	See temperature maps above. James, Lat. Am., p. 32.
rojector, show the country of Chile perimposed on a map of the North south at the top). A comparison he similarity of west coast climates as. Ask: How can you explain this	Overlay maps of Chile and N. Am. Coast.

S. Applies previously-learned concepts and generalizations to new data.

G. Places in the interior of continents tend to have greater extremes of temperature than places along the coast.

S. Generalizes from data.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, physical features which block winds from certain directions, ocean currents, etc.

S. Draws inferences from a comparison of different map patterns of the same area.

G. Rainfall is affected by distance from bodies of water, wind direction, temperature, physical features which block winds carrying moisture, and ocean currents.

S. Sets up hypotheses.

5. The int
extreme
coast a

6. A great
humid t

   a. Alth
   the
   peop

   b. The
   ity,
   abse

   c. No e
   the
   to n
   west

7. North a
savanna

   a. These
   but
   ality

   b. For
   the
   South

concepts
data.

ontin-
xtremes
along

5. The interiors of both continents have greater extremes in temperature than do the west coast areas.

the dis-
vation,
dies,
features
ain di-
c.

6. A great part of the Amazon Basin contains a humid tropical climatic type.

   a. Although this region is near the equator, the great extremes of temperature most people imagine do not occur.

   b. The false impression is due to high humidity, high average temperatures, and the absence of a distinct cool season.

   c. No extremes of temperature are found in the equatorial Amazon that could compare to normal summer heat waves in the midwestern United States.

parison
the

ance
rec-
fea-
ying
.

7. North and south of the tropics are areas of savanna, or wet and dry low-latitude climates.

   a. These areas remain warm most of the year, but there is a marked wet and dry seasonality.

   b. For the most part, these areas contain the lowest population densities in South America.

28. Introduce, or review, the concept of continental climatic influence by having students compare temperature extremes between, for example, 50 degrees north latitude in North America and 50 degrees south latitude in South America. This will lead to the concept of marine influence on land bodies.

29. Have a pupil look up temperature and humidity statistics recorded in the Amazon Basin. He should report to the class. Have the class compare these statistics with similar readings for a station in the midwestern U.S. Look once again at the map in James on the frequency of hot days. Have a discussion based on why people have a mistaken concept about temperature in equatorial regions. (Or pospone this activity until pupils study Manaus.)

"S
Ja

30. Have pupils locate savanna areas. Be sure they understand the characteristics of such areas. Discuss reasons for variations in rainfall. Compare the map of savannas with a population density map. Ask: What do you notice about densities in such regions? What might explain this relationship?

Se
La

oncept of continental clima-
dents compare temperature ex-
, 50 degrees north latitude in
s south latitude in South Amer-
concept of marine influence

ature and humidity statistics
n. He should report to the
are these statistics with sim-
in the midwestern U.S. Look
mes on the frequency of hot
sed on why people have a mis-
ture in equatorial regions.
ntil pupils study Manaus.)

"Student Almanac."
James, Lat. Am., p. 32.

areas Be sure they under-
f such areas. Discuss reasons
Compare the map of savannas
ap. Ask: What do you notice
ions? What might explain this

See vegetation maps in James,
Lat. Am., pp. 44-45.

S. Interprets map symbols in terms of map legend.

G. When people migrate from one place to another, they carry with them material objects and culture.

A. IS SCEPTICAL OF THE FINALITY OF KNOWLEDGE; CONSIDERS THEORIES TENTATIVE, SUBJECT TO CHANGE IN THE LIGHT OF NEW EVIDENCE.

G. Ways of living differ from one society to another.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

IV. Diversity in social a
in part from the pene
groups of varied back

A. South America was
ples from Asia, wh

1. These groups ar
"land bridge;"
over many centu
age."

2. Although simila
ferent Indian g
distinct culture

3. Some of the most
America were the
bia; the Inca of
Equador, Bolivia
Aztecs and Mayas

a. The cultural
seen in the g
could gain a

IV. Diversity in social and cultural systems results in part from the penetration and colonization by groups of varied backgrounds.

A. South America was originally populated by peoples from Asia, who became known as Indians.

1. These groups arrived via the Bering Strait "land bridge;" their migration occurred over many centuries following the last "ice age."

2. Although similar in some respects, the different Indian groups developed separate and distinct cultures.

3. Some of the most advanced cultures of Latin America were the Chibcha of highland Columbia; the Inca of the highlands of Peru, Equador, Bolivia, and northern Chile; the Aztecs and Mayas of Mexico.

a. The cultural level of these groups was seen in the great numbers of people who could gain a living from the land.

31. Project maps showing population diversity within Latin America today. Ask: What population groups can you identify from these maps? Where did all of these different kinds of people who live in South American come from originally? Why would the migration of so many pe ple to S. America be important?

Use a world map or globe and ask pupils their ideas about possible routes of migration, given the premise that the people of the Americas came from another continent.

32. Have students read an introductory article on where the first people of America came from, to check their conclusions. Have a discussion pointing out the various theories held on this question. Then use a map to show what social scientists believe.

33. At this point, do not have pupils spend much time investigating the different Indian cultures which were established in Latin America prior to the coming of the white man. Pupils will investigate some of them in more detai when they study individual case studies of sequent occupance. (They will also study the Aztecs in more detail in grade six.) However, at this point prepare a bulletin board display or a large chart to show differences between the most advanced cultures and some of the others One side of the display might show a map identifying the location of the Aztecs, Mayas, Incas, and Chibcha. Beneath it, include pictures and drawings illustrating the sedentary agriculture, the architecture, etc. of each group. On the other half of the display, show a map locating some of the other groups to be shown. Use photos to illustrate the nomadic hunters and fishers, shifting

population diversity within Latin
What population groups can you
aps? Where did all of these dif-
e who live in South American come
would the migration of so many peo-
important?

obe and ask pupils their ideas a-
of migration, given the premise
e Americas came from another con-

introductory article on where the
ca came from, to check their con-
cussion pointing out the various
question. Then use a map to show
s believe.

have pupils spend much time inves-
t Indian cultures which were estab-
ca prior to the coming of the white
estigate some of them in more detail
idual case studies of sequent occu-
so study the Aztecs in more detail
er, at this point prepare a bulle-
a large chart to show differences
nced cultures and some of the others.
ay might show a map identifying the
, Mayas, Incas, and Chibcha. Be-
ures and drawings illustrating the
the architecture, etc. of each
alf of the display, show a map lo-
er groups to be shown. Use photos
dic hunters and fishers, shifting

Map of population diversity in Latin America (e.g. James, Lat. Am., p. 8).

Maps of location of different types of economy among Indian groups in Latin America.

b. Their seden
could suppo
than could
gatherers b
ita food pr

c. These cultu
crop.

4. Besides these
a large number
spread over th

a. Various tri
hunters, fi

b. The Araucan
of the Amaz
fishing, an

c. The Tupi an
tivators.

d. The Abipone
gentine pla
hunting the

S. Reads rapidly for main ideas.

B. During the Age of
ments were added
social patterns.

b. Their sedentary agricultural economy could support a higher population density than could those who remained hunters and gatherers because of their higher per capita food production.

c. These cultures used maize as a basic food crop.

4. Besides these advanced cultures there existed a large number of separate Indian groups spread over the remainder of Latin America.

    a. Various tribes ranged from semi-nomadic hunters, fishers, and primitive farmers.

    b. The Araucanians of Chile and the Jivaro of the Amazon Basin combined hunting, fishing, and incidental agriculture.

    c. The Tupi and Guarani, were shifting cultivators.

    d. The Abipones and the Puelche of the Argentine plains derived food mainly from hunting the "guanaco," a kind of llama.

for main ideas.

B. During the Age of Exploration, European elements were added to the already diverse Indian social patterns.

cultivators, and those who combined some of each. Then at the bottom of the display show a map of each side showing population densities (in a crude way) for groups in each region. Or use a legend to explain that the Indians on the left hand side developed much higher population densities. Discuss the display. What differences were there between the more advanced cultures and the others? What differences were there between the less advanced groups? Why could the more advanced cultures have more people living in a region of the same size?

31. Give pupils figures on the proportion of the population of Latin America which is of Spanish and Portuguese descent. Discuss the meaning of the term Latin America. Then have pupils read brief descriptions about the Spanish and Portuguese explorers and their reasons for coming. They should read rapidly, just for the main ideas.

Textbooks.

S. Draws inferences from a comparison of different map patterns of the same area.

1. Spanish penetra
focal points bu
the shores of t
areas of the hi
lation.

   a. The Spanish
   from such ce
   City, and Gu

   b. The Spanish
   the Pacific
   and Ascuncio

   c. The Spanish
   from a serie
   Mexico coast

   d. Having reach
   trated in al

2. The Portugues
sites on the At

3. Both Spanish an
first where the
dian population

   a. The Indians h
   of wealth (go
   Spanish and P

   b. The Indians p
   could be conv

   c. The Indians c
   securing more
   used as agric
   Portuguese di
   did the Spani

comparison
ns of the

1. Spanish penetration originated from several focal points but tended to spread out from the shores of the Gulf of Mexico and into areas of the highest density of Indian population.

   a. The Spanish moved into Central America from such centers as Guadalajara, Mexico City, and Guatamala City.

   b. The Spanish moved north and south along the Pacific coast and inland to Potosi and Ascuncion from Lima, Peru.

   c. The Spanish made short probes southward from a series of towns along the Gulf of Mexico coast of South America.

   d. Having reached Ascunsion, the Spanish penetrated in almost all directions.

2. The Portuguese penetrated inland from such sites on the Atlantic coast.

3. Both Spanish and Portuguese moved into areas first where there were large centers of Indian populations.

   a. The Indians had accumulated great stores of wealth (gold and silver) which the Spanish and Portuguese wanted.

   b. The Indians presented a populace which could be converted to Christianity.

   c. The Indians could be used as laborers in securing more precious metals and could be used as agricultural workers. However, the Portuguese did not gain as many workers as did the Spanish.

32. Show pupils maps of Indian settlement in Latin America and maps of Spanish and Portuguese penetration. Ask: Did the Europeans try to avoid going into areas with large Indian populations or did they try to go to such areas? Why do you think they tried to go to such areas? What were they looking for? What have you learned already about the Indian cultures which might lead the Europeans to think they could find gold and silver in centers of Indian settlement? Why else might they want to go to such areas? (If necessary, tell pupils that some of the early people going into these areas were Catholic priests. Why might they wish to go there? Explain briefly the relationship at this time between the Church and the governments of Spain and Portugal.) If pupils do not think of the possibility of the need for agricultural workers, say: Suppose you wished to farm in Latin America and to make a big fortune doing so. Why might you want to go where there were many Indians? etc. Which country was able to gain the largest number of Indian workers? Why? Have two pupils assume the roles of anthropologists or historians. They should discuss the question: Why was it so easy for the Spanish and Portuguese to conquer the Indians and make them do as they wished?

Maps
L. A
Am.
Span
trat
Jame

Tell pupils that they should try to find out as they study individual case studies later just how much the Spanish and Portuguese affected the ways of living of the Indians whom they conquered.

dian settlement in Latin America
d Portuguese penetration. Ask:
to avoid going into areas with
ns or did they try to go to such
nk they tried to go to such areas?
for? What have you learned al-
cultures which might lead the
y could find gold and silver in
lement? Why else might they want
(If necessary, tell pupils that
le going into these areas were
might they wish to go there? Ex-
tionship at this time between the
ents of Spain and Portugal.) If
the possibility of the need for
say: Suppose you wished to farm
make a big fortune doing so. Why
here there were many Indians? etc.
to gain the largest number of In-
ve two pupils assume the roles of
orians. They should discuss the
o easy for the Spanish and Portu-
ndians and make them do as they

hould try to find out as they study
later just how much the Spanish
the ways of living of the Indians

Maps of Indian settlement in L. America (see James, Lat. Am., pp. 15, 16). Maps of Spanish and Portuguese penetration of L. America (see James, pp. 18, 20).

S. Sets up hypotheses.

S. Draws inferences from a comparison of different map patterns of the same area.

S. Reads rapidly for main ideas.

S. Draws inferences from a comparison of different map patterns of the same area.

4. By the
and Po
east o
Portug
ish.

5. All of
import

C. Negroes w
of the re

D. During the
grants hav
as Italy,
from Spain
to areas r
Uruguay, A
Brazil.

1. The lan
remote
times a
degree.

2. The new
populat
earlier
metals

4. By the Treaty of Tordesillas between Spain and Portugal (1494) all lands discovered east of 50 degrees west longitude would be Portuguese, and all land west would be Spainish.

omparison
of the

5. All of the original settlement points are important urban centers today.

eas.

C. Negroes were added to the populations of several of the regions in order to provide more workers.

omparison
of the

D. During the last one hundred years, many immigrants have arrived from other countries such as Italy, Germany, Poland, and Japan as well as from Spain and Portugal. Most of them have gone to areas not previously developed much, such as Uruguay, Argentina, and the Sau Paulo area of Brazil.

1. The land bordering the Plata had been only a remote part of the Spanish empire in earlier times and had not been settled to any large degree.

2. The newer immigrants tended to go to thinly populated regions which had not attracted earlier settlers because they lacked precious metals or could not grow sugar cane.

33. Explain the Treaty of Tordesillas and then discuss: Why do you think the Portuguese penetrated beyond 50 degrees longitude in the Amazon Basin? Point out that Portuguese is the official language of Brazil, while Spanish is the official language in the other countries.

34. Have pupils examine a map of Latin America today as compared with one of the early settlement sites from which the Spanish and Portuguese penetrated into Latin America. Ask: What has happened to these early settlements? Why do you think this has happened?

35. Tell pupils that Negroes and people of Negro descent are also found in Latin America. Use map to show some of places where they are found. Have several pupils read rapidly to find out how they gotthere. They should report their findings to the class.

36. Tell pupils that during the last 100 years many immigrants have arrived in Latin America. Use a population map to point out where most of these people have settled. Have pupils compare this map with the earlier map of Spanish and Portuguese settlements. Ask: Did these late arrivals settle in areas of heavy or light Spanish and Portuguese settlement? Why?

Tordesillas and then discuss: Why uese penetrated beyond 50 degrees Basin? Point out that Portuguese e of Brazil, while Spanish is the e other countries.	
ap of Latin America today as com- rly settlement sites from which penetrated into Latin America. d to these early settlements? Why happened?	Maps of early Spanish and Portuguese penetration (see James, Latin America, pp. 18, 20).
and people of Negro descent are . Use map to show some of ound. Have several pupils read they got there. They should re- the class.	Map of Latin America. Textbooks.
the last 100 years many immigrants merica. Use a population map to these people have settled. Have with the earlier map of Spanish nts. Ask: Did these late arriv- heavy or light Spanish and Portu-	See above for map of population in Latin America.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous but there are transitional zones where boundaries are drawn between different regions.

G. Regions are delimited on many different bases, depending upon the purpose of the study. Some are delimited on the basis of a single phenomenon, some on the basis of multiple phenomena, and some on the basis of functional relationships.

F. Thus, the cul
of South Amer
general regio
fied. (See m

1. Areas of p
mostly rec

2. Predominan

3. Predominan
Andean.

4. Mixed popu
Negroes.

5. Mixed popu
dominating

NOW TEACH THE CASE

one or more
The core
ous but
ones where
tween dif-

n many dif-
upon the
Some are de-
a single
basis of
some on the
ationships.

F. Thus, the cultural differences in the peoples of South America are many. However, several general regions of homogeneity may identified. (See map.)

1. Areas of predominantly European settlement -- mostly recent origin.

2. Predominantly Andean Indian center.

3. Predominantly Indian centers other than Andean.

4. Mixed population -- large percentage of Negroes.

5. Mixed population -- large mestizo type predominating.

NOW TEACH THE CASE STUDIES ON LATIN AMERICA.

37. Once more project a map showing the present-day population mixtures. Have pupils notice how Latin America could be regionalized on the basis of population type. Have them identify areas which are made up predominately of descendents of Europeans. What large cities would fall within such regions? Now have pupils identify areas which are made up predominantly of descendents of Europeans. Tell the class that they will study Buenos Aires in more detail. Now have pupils identify areas which are predominantly Andean Indians. If pupils have come through the Center's first grade course, point out that they have already studied such a culture when they studied the Quechua of Peru. If pupils have not come through this course, tell them that they will study the Cuzco area in more detail. (Point it out on the map.) Now have pupils identify areas which are predominantly non-Andean Indians. Point out Manaus on the map, and tell the class that they will study Manaus and the surrounding region in more detail. Now have pupils identify regions of mixed populations with a large percentage of Negroes. Have them locate important cities in such regions. Tell tham that they will study Sao Paulo in more detail. Finally, have pupils identify areas of mixed populations with the mestizo type predominating. Point out that they will study Chile as a whole, since it is predominantly mestizo, even though part of the area is settled more heavily by people of unmixed European descent.

James, *Lat. Am.*, p. 8.

Ask: How does such a regionalization of South America differ from the ways in which we have regionalized the United States and Canada? Why might geographers sometimes use this type of regionalization rather than one based upon physical features? How could one regionalize Latin America other than by population structure or physical features?

NOW TEACH THE CASE STUDIES ON LATIN AMERICA.
THEN TURN TO THE CULMINATING PROCEDURES WHICH FOLLOW.

CULMINATING SECTION

G.. Regions are dlimited on many different bases, depending upon the purpose of the study. Some are delimited on the basis of a single phenomenon, some on the basis of multiple phenomena, and some on the basis of functional relationships.

S. Generalizes from data.

S. Gains information by studying films.

G. The nations of the world are interdependent.

These regional
ferent culture
the countries h
kinds of proble
ly the way in w
environment in
perceptions, an

CULMINATING SECTION

ted on many dif-
pending upon the
tudy. Some are
basis of a single
on the basis of
na, and some on
ctional relation-

data.

n by studying films.

ne world are in-

These regional studies have indicated different culture regions, even though many of the countries have faced some of the same kinds of problems. They also indicate clearly the way in which man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

CULMINATING PROCEDURES ON LATIN AMERICA AND THE COURSE

1. Show a series of slides or pictures which you have not used before of the different Latin American regions studied. Try to choose pictures which are fairly typical of these regions. Now ask children to try to identify where the picture was taken (in general terms). Why do they think so? Why can't they tell?

2. Ask: Why do you think we looked at each of these case studies as separate regional studies? Do you think that this system of regionalization was justified? Why or why not?

3. Discuss: How do the Latin American countries differ from the U.S.? From Canada?

4. Hold a summarizing discussion in which pupils identify some of the problems which face many of the Latin American countries. What problems do they seem to have in common, if any? What problems do some have which others do not have?

5. Perhaps show a film illustrating some of the problems facing Latin American countries or our relations with them.

6. Have a group of pupils prepare a bulletin board display in which they illustrate the products which the U.S. gets from Latin American countries. Discuss: How important are these products to us?

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

. Geographers seek information about areas on the earth's surface which enables them to compare, synthesize, and generalize about these areas.

. Geographers ask different questions about places, depending upon their purposes at the moment.

G. Maps make it possible to discern patterns and relationships among a vast amount of data.

7. Give pupils a statement which represents a geographic deterministic point of view. Ask them to write a brief paper indicating what they think of this statement. Then discuss the papers.

8. Discuss: What factors have brought about changing use of the environment in Latin American countries? Are these factors at all like any of those which brought about the changing use of the environment in the U.S.? in Canada?

9. Ask: Have your ideas about what a geographer does changed at all since you began the study of geography this year? If so, how? Have your ideas about people's use of the land changed? If so, how? Have your ideas about the value of maps changed? If so, how?

BIBLIOGRAPHY

I. Textbooks for Pupils

Borchert, John and Jane McGuigan. Geography of the New World. Chicago: Rand McNally, 1961.

Lindop, Edmund, et.al. Understanding Latin America. Boston: Ginn, [illegible] 6 ed.

II. Secondary School and College Texts: Sources of Maps and Tables

Deasy, et.al. The World's Nations. Philadelphia: Lippincott, 1958.

Kohn, Clyde and Dorothy Drummond. The World Today, Patterns and Cultures. New York: McGraw-Hill, 1963.

James, Preston. Latin America. New York: Odyssey Press, 1959.

Saveland, Robert and Robert Glendinning. World Resources, Western Hemisphere. Boston: Ginn, 1966.

Wheeler, Jessie H., et.al. Regional Geography of the World. New York: Holt, 1955.

1679
C 1

Grade Five
Unit VII: LATIN AMERICA
SUB-UNIT : CASE STUDY ON BUENOS AIRES

RESOURCE UNIT

These materials were developed by the Project Social Studies Center of the University of Minnesota under a special grant from the U.S. Office of Education. (Project No. HS-045)

OBJECTIVES

This unit should make progress toward developing the following:

GENERALIZATIONS

1. Things can be located at specific points on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.

2. Temperature is affected by distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.

3. Rainfall is affected by distance from bodies of water, ocean currents, wind direction, temperature, and physical features which blaock winds carrying moisture.

4. Soil in a particular place is affected by the type of basic rock in the region; the climate; vegetation; erosion; wind, glaciers and rivers which move soil; as well as by how man treats the soil.

   a. Nature changes the character of the earth through biotic processes.

5. Vegetation and what can be grown is affected in part by soil.

6. The amount of mo
and crops is af
when the area re
and by the tempe

   a. The time of
   its precipita
   culture, If
   season, it ma

   b. The land in h
   the warm air
   fore, more ra
   in these reg
   are not so h

7. Mountains freque
water for rivers

8. Grain crops are
tively flat land
tains.

9. Man uses his phy
of his cultural
level of technol

   a. Man changes

   b. The significa
   cultural deve
   outside of an

OBJECTIVES

toward developing the following:

cific
e, usually
id and de-
and long-

istance from
ance from
g winds, and
k winds from

ance from
nts, wind
physical
carrying

s affected
the region;
sion; wind,
ve soil;
the soil.

ter of the
esses.

rown is af-

6. The amount of moisture needed for vegetation and crops is affected by the time of year when the area receives most of its moisture and by the temperature of an area.
   a. The time of year when an area receives its precipitation is important to agriculture. If it comes during the growing season, it makes it easier to grow crops.
   b. The land in hot regions dries fast as the warm air picks up moisture; therefore, more rain is needed to grow crops in these regions than in regions which are not so hot.
7. Mountains frequently provide sources of water for rivers and so for irrigation.
8. Grain crops are raised more easily on relatively flat lands than in hills and mountains.
9. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.
   a. Man changes the character of the earth.
   b. The significance of location depends upon cultural developments both within and outside of an area.

1) A change in situation brings about a corresponding change in the use of a site.

c. Types of agriculture in a region depend upon man's cultural values, perceptions and level of technology as well as upon climate, soils, and topography.

d. Migration involves the movement of culture and material objects to other parts of the world and results in changing those areas.

10. The world is a community of interdependent countries.

   a. People in most societies of the world depend upon people who live in other communities, regions, and countries for goods and services and for markets for their goods.

   b. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

   c. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, landforms, etc.

---

d. Im
pos
we
to

11. Towns
out; t
portat
ferent

a. Cit
ten
in
be
to
por
com

b. Fac
iti
tor
att

12. Popula
earth's
thinly

13. Culture
diffus

14. Changes
effects
whether
organiz
is a pa

15. Machine
product

situation brings about
ding change in the use

ulture in a region de-
s cultural values, per-
evel of technology as
limate, soils, and top-

ves the movement of
erial objects to other
rld and results in
areas.

munity of interdepen-

societies of the world
ple who live in other
gions, and countries
ervices and for mark-
oods.

ly to grow up if they
ns which are needed
ing community or for
onal region.

be produced better
an in another be-
e, resources, trans-
s, access to re-
to markets, people's
ms, etc.

d. Improved transportation facilities make possible wider and bigger markets as well as better and less costly access to resources.

11. Towns need means of shipping goods in and out; they are likely to grow up where transportation is good, particularly where different types of transportation meet.

   a. Cities which become big trading centers tend to grow up where there is a break in transportation and so where goods must be moved from one type of transportation to another or from one company's transportation facilites to those of another company.

   b. Factories need good transportation facilities, but large cities with many factories and large numbers of people also attract improved transportation facilities.

12. Population is distributed unevenly over the earth's surface; many of the land areas are thinly populated.

13. Culture traits may change by a process of diffusion.

14. Changes in one aspect of a culture will have effects on other aspects; changes will ramify whether they are technological, in social organization, in ideology, or whatever else is a part of the cultural system.

15. Machinery and power make possible greater production per person.

16. New innovations and discoveries open up new fields of production and make possible an increased output in old fields of production.

17. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

ATTITUDES

1. IS SCEPTICAL OF THE FINALITY OF KNOWLEDGE; CONSIDERS GENERALIZATIONS AND THEORIES AS TENTATIVE, ALWAYS SUBJECT TO CHANGE IN THE LIGHT OF NEW EVIDENCE.

SKILLS

1. Sets up hypotheses.
2. Draws inferences from pictures.
3. Interprets tables.
4. Uses atlas index to locate places.
5. Interprets map symbols in terms of map legend.
6. Develops a system of regions to fit a particular purpose.
7. Applies previously-learned concepts and generalizations to new data.
8. Tests hypotheses against data.
9. Generalizes from data.

Objectives

S. Uses atlas index to locate places.

G. Things can be located at specific points on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.

S. Draws inferences from pictures.

G. Rainfall is affected by distance from bodies of water, ocean currents, wind directions, temperature, and physical features which block winds carrying moisture.

G. Mountains frequently provide sources of water for rivers and so for irrigation.

S. Develops a system of regions to fit a particular purpose.

Outl

I. Buenos Aires
Pampas region
The pampas ha
production.

A. The pampas

1. The lan
Great P

locate

d at spe-
earth's
ignated by
described
and longi-

m pictures.

by distance
, ocean cur-
ns, tempera-
eatures
rrying mois-

provide sour-
ers and so

regions to
pose.

Outline of Content

I. Buenos Aires is the chief city for the Humid Pampas region of southeastern South America. The pampas have the potential for rich farm production.

A. The p mpas are like steppes.

1. The land relief is much like that of our Great Plains.

Teaching Procedures

1. Have a pupil use an atlas index to locate Buenos Aires on a large wall map.

2. Project a picture of farming on the pampas today. What can pupils tell about what the land looks like? about the soil? about the climate?

Lind
Amer
Whit
U.S.
p. 2
Amer
Film
Sout
Eyeg

3. Project a cross sectional diagram of Argentina including Buenos Aires and the Andes. Discuss possible effects of the Andes on Argentina.

4. Have pupils study a physical map of Argentina and try to divide the country up into regions according to physical features. They might do this on a sheet of acetate

e. g
Unde
p. 4

ures	Materials
atlas index to locate Buenos Aires .	
f farming on the pampas today. What ut what the land looks like? about e climate?	Lindop, Understanding Latin America, p. 332. Whittemore, et. al., The U.S., Canada, Latin America, p. 29 (of section on Latin America.) Filmstrip: Farm Lands and Southern South America, Eyegate, frames 12-14.
tional diagram of Argentina including e Andes. Discuss possible effects of ina.	
a physical map of Argentina and try try up into regions according to phy- hey might do this on a sheet of acetate	e. g. Gartler, et. al., Understanding Argentina, p. 4.

S. Interprets map symbols.

G. Man changes the character of the earth.

A. IS SCEPTICAL OF THE FINALITY OF KNOWLEDGE; CONSIDERS GENERALIZATIONS AND THEORIES AS TENTATIVE, ALWAYS SUBJECT TO CHANGE IN THE LIGHT OF NEW EVIDENCE.

S. Sets up hypotheses.

G. Temperature is affected by distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.

S. Tests hypotheses against data.

a. The
ban

b. The
war

c. Sou
lak
dur
is

2. Most o
althou
the we

3. The cli
like th

a. Summ
are

1) T
d
l

2) T
h
f

ools.

racter of the

FINALITY OF
S GENERALIZA-
AS TENTATIVE,
HANGE IN THE
CE.

cted by distance
levation, dis-
er bodies, pre-
physical fea-
inds from cer-

ainst data.

---

a. The Plata River is bordered by a steep bank called the barranca.

b. The land slopes only gradually southward.

c. South of Buenos Aires is an area of lakes during rainy seasons and marshes during the rest of the year. This area is known as the Salada Slough.

2. Most of the land is covered by short grass, although there are some scrub trees along the western limits of the Pampas.

3. The climate of the humid pampas is much like that in Southeastern United States.

   a. Summers are long, hot, and humid; winters are short, mild, and humid.

      1) The growing season varies from 300 days close to Buenos Aires to about 140 days south of Bahia Blanca.

      2) There are some frosts, but snow is not heavy; therefore the area can be used for year-round grazing.

over a large map of Argentina drawn on a piece of chalkboard. Now locate the pampas. What kind of relief is found in this area? Tell pupils the meaning of the name.

Point out the area of the Salada Slough. Ask: What is its elevation? What might this area be like if it were very dry? If it got a great deal of precipitation? Tell pupils to check on what it is actually like after they have learned about the climate of the region.

5. Remind pupils of the photo of the pampas. Ask: Did you see any trees? Now show pupils a map of vegetation in the region. What kind of vegetation is pictured for the area on the map? What might account for the difference? Tell pupils about the bunch grass discovered by the white men in this area and the location of scrub trees. Also tell them that Indians burned the land over frequently to make hunting easier. What might have happened to any trees in the area? Point out some of the theories about what vegetation was like originally.

6. Have pupils examine a physical map to note the location of the pampas in relationship to the equator. Remind them once again to study the elevation. Show them a map of wind directions. Then ask: What do you think the temperatures would be like in the pampas as a whole? in Buenos Aires? in the rest of Argentina?

   Now let pupils check their hypotheses against actual temperature charts. Ask: When does Argentina get its summer? its winter? How much range of temperature does it have? What effect would this temperature range have upon agriculture?

tina drawn on a piece of chalk-
mpas. What kind of relief is
pupils the meaning of the name.

Salada Slough. Ask: What is
this area be like if it were
eat deal of precipitation? Tell
is actually like after they
mate of the region.

See James, Latin America, p. 325.

of the pampas. Ask: Did you
upils a map of vegetation in-
vegetation is pictured for the
ht account for the difference?
h grass discovered by the white
ocation of scrub trees. Also
ned the land over frequently to
might have happened to any
out some of the theories about
riginally.

For vegetation map, see James, Latin America, p. 44.

cal map to note the location
ip to the equator. Remind
e elevation. Show them a map
sk: What do you think the tem-
the pampas as a whole? in
f Argentina?

For maps of S. America, see James, Lat. Am., p. 25.

hypotheses against actual tem-
n does Argentina get its sum-
range of temperature does it
is temperature range have upon

"Student Atlas."

S. Sets up hypotheses.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Rainfall is affected by distance from bodies of warm water, ocean currents, wind directions, temperature, and physical features which block winds carrying moisture.

G. The amount of moisture needed for vegetation and crops is affected by the time of year when the area receives most of its moisture and by the temperature of an area.

G. The time of year when an area receives its precipitation is important to agriculture. If it comes during the growing season, it makes it easier to grow crops.

G. The land in hot regions dries fast

b. Precipitation is adequate for agriculture in most of the area, although the southwestern part is fairly dry.

1) There are violent thunderstorms when the cool air masses which cross the Andes from the northeast meet the sultry warm air masses from the tropics.

2) Precipitation is heavier in the summer months than in the winter months. (However, it should be remembered that the summer months are December, January, and February in Argentina.)

3) Less rainfall is needed in the southern part of the pampas, because temperatures are lower and there is less evaporation.

Give pupils figures on the variation in length of growing seasons for different parts of the pampas. Compare with the length of the growing season in some parts of the U.S. which they have studied, including their own state.

7. Have pupils compare average temperatures in Buenos Aires with those of some of the cities in the eastern part of the United States. Discuss the implications and set up hypotheses about possible effects.

"Studen

8. Have pupils look at the different map patterns once more. Ask: What would you expect to find true of precipitation in Argentina as a whole? in the different parts of the pampas? in Buenos Aires? Why?

Have pupils check their guesses against a precipitation map and against a table showing precipitation for Buenos Aires. Discuss reasons for this pattern. Also ask: How would this amount of precipitation affect agricultural production?

Gartler
Argenti

Tell pupils that less rainfall is needed to grow crops in the southern part of the pampas than in the northern part. Ask: Why?

variation in length of grow- parts of the pampas. Compare wing season in some parts of tudied, including their own	
e temperatures in Buenos Aires cities in the eastern part of s the implications and set up effects.	"Student Almanac."
ferent map patterns once more. t to find true of precipitation n the different parts of the Why?	
esses against a precipitation owing precipitation for Buenos r this pattern. Also ask: recipitation affect agricul-	Gartler, et.al., Understanding Argentina, p. 10.
fall is needed to grow crops e pampas than in the northern	

as the warm air picks up moisture; therefore more rain is needed to grow crops in these regions than in regions which are not so hot.

S. Develops a system of regions to fit a particular purpose.

G. Soil in a particular place is affected by the type of basic rock in the region, the climate, vegetation, erosion, wind, glaciers and rivers which move soil, as well as by how man treats the soil.

G. Vegetation and what can be grown is affected in part by soil.

S. Interprets map symbols in terms of map legend.

S. Sets up hypotheses.

S. Sets up hypotheses.

4. S

a

b

c

B. The
othe
powe

icks up moisture;
in is needed to
se regions than
are not so hot.

of regions to
urpose.

ar place is af-
of basic rock
climate, vege-
nd, glaciers and
oil, as well as
he soil.

can be grown is
soil.

ols in terms of

4. Soils on the pampas are deep and fertile.
   a. Much of it was carried to this region by winds from the arid and semi-arid regions of western Argentina.
   b. A large area has much alluvial soil left by eroded mountains.
   c. The soil is very deep. For example, Buenos Aires is 985 feet above bedrock.

B. The pampas are almost without natural resources other than soil. The region also lacks water power potential.

9. Have pupils make another map of Argentina based upon climate. They should make it on acetate and place it over the earlier one they made based upon physical features (activity #4). Have the class compare the two patterns. What relationships do they notice?

10. Have pupils examine a soils map of South America or of Argentina. What kinds of soil are found in the pampas? Now describe the soil and the sources of the soil. Tell pupils about the depth of the soil. Discuss the implications for agriculture.

For ge
Goode'
the se

11. Have pupils look at a minerals map. What minerals do they find in Argentina? in the pampas? What do they think this might mean for Buenos Aires?

Kohn an
day, pp

12. Have pupils examine a physical map once more. They should note the rivers and the areas through which the rivers flow. Ask: Do you think that the people could develop much water power on these rivers? Why or why not? Then quote James on the water power potential close to Buenos Aires.

James,

map of Argentina based upon cli- it on acetate and place it over e based upon physical features class compare the two patterns. ey notice?	
ls map of South America or of soil are found in the pampas? the sources of the soil. Tell the soil. Discuss the implica-	For general soils map, see Goode's World Atlas. Project the section which is needed.
erals map. What minerals do n the pampas? What do they Buenos Aires?	Kohn and Drummond, World Today, pp. 272-273.
sical map once more. They should eas through which the rivers flow. he people could develop much wa- ? Why or why not? Then quote potential close to Buenos Aires.	James, Lat. Am., pp. 358-359.

S. Sets up hypotheses.

G. Towns need means of shipping goods in and out; they are likely to grow up where transportation is good, particularly where different types of transportation meet.

S. Sets up hypotheses and tests against data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

C. Buenos A
Rio De L
flow. H
shallow,
the silt
Aires si

II. We look at t
pampas in th
pied by Indi
the Puelche,

A. The Puelc
they did
burn gras
dug roots
vegetatio

B. They had
around to
to the ll
like bird
meat.

C. They roame
frequently

D. Their prir
were the b

hipping goods
likely to
rtation is
ere different
on meet.

C. Buenos Aires is located on a good spot in the Rio De La Plata into which two important rivers flow. However, the Rio De La Plata is very shallow, and sand bars build up quickly from the silt coming down from the rivers. The Buenos Aires site does not have a good natural harbor.

tests.

environment
al values,
of technol-

II. We look at the Buenos Aires region and the humid pampas in the period 1450-1550 when it was occupied by Indians. We will look at how one tribe, the Puelche, lived in this area.

A. The Puelche had a hunting and gathering economy; they did little to modify the land except to burn grass to make it easier to hunt. They also dug roots and used some of the other existing vegetation for food.

B. They had no permanent villages but rather moved around to hunt the guanaco, an animal similar to the llama, and the rea which was an ostrich-like bird. These were their main sources of meat.

C. They roamed in small bands across the pampas, frequently fighting each other.

D. Their principal weapons for fighting or hunting were the bow and arrow, the loose, and the bolo.

13. Have pupils look once more at the site of Buenos Aires. If possible project a large scale map showing its location and the rivers entering the bay. Show pictures of the rivers. Ask: What possible advantages can you see to this location? Why? (Ask pupils to consider rivers and what they have already learned about the physical features and climate and soils of the country.)

    Read aloud a brief description of the bay and sand bars. Ask: What do you think about the advantages of this site now? Does it have as many advantages as Seattle had? as New York had? etc. Would you expect it to become an important port? Why? Let pupils set up hypotheses to test later.

James
p. 3
For
Arge
Eyega

14. Tell pupils that they are now going to find out how the early Indians lived in this pampas region. Ask: How do you think they might have lived? Now have a pupil give a report or read aloud a brief description, or just tell pupils how they lived. Ask: Why do you think they might have set fires to burn over parts of the pampas? Why didn't they build permanent villages?

t the site of Buenos Aires.
scale map showing its loca-
the bay. Show pictures of
ible advantages can you see
k pupils to consider rivers
earned about the physical
ls of the country.)

on of the bay and sand bars.
t the advantages of this
any advantages as Seattle
Would you expect it to be-
? Let pupils set up hypoth-

v going to find out how the
pampas region. Ask: How do
ved? Now have a pupil give
ef description, or just tell
Why do you think they might
parts of the pampas? Why
villages?

James, Latin Am., p. 353 (map);
p. 352 (description).
For pictures, see Filmstrip:
Argentina-The Land and People,
Eyegate, frames 19-21, 25.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Draws inferences from pictures.

S. Applies previously-learned concepts and generalizations to new data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Culture traits may change by a process of diffusion.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Sets up hypotheses.

III. We look
under t

A. Sever
at th
did n
attem
were
used

B. The c
vide
water
to As
to tr
went
to go

C. When
(1778
24,00
in pop
tion

environment
al values,
of technol-

III. We look at Buenos Aires and the humid pampas under the early Spanish rule from 1580 to 1780.

pictures.

rned concepts
new data.

environment
al values,
of technol-

ge by a

A. Several attempts were made to establish a town at the present site of Buenos Aires, but they did not succeed until 1560. When an earlier attempt was made, some of the horses and donkeys were freed. They multiplied rapidly and were used by the Indians.

nvironment
l values,
of technol-

B. The chief purpose of the early town was to provide a place where ships could take on fresh water and supplies before sailing up the river to Ascunsion. The people were not permitted to trade with Europe, although some smuggling went on. The Spanish wanted all of the trade to go through Peru.

C. When the town was finally opened up for trade (1778), it had an estimated population of 24,000. The trade brought about an increase in population, but the city still had a population under 90,000 by 1850.

15. Project a drawing of what Buenos Aires looked like in 1700. Discuss: What can you tell from this drawing about the population? size? about activities carried on in the town?

Li
p.

16. Tell pupils that the Spanish explorers thought that the pampas were useless. Ask: Why do you think they might have thought this? What were they looking for?

17. Have a pupil report on the early attempts to establish a town at this site, including the way in which Spanish animals were freed and used by Indians and later colonists.

Li
pp

18. Tell pupils how the Spanish sent goods to South America via Peru for many years and how the port was used later to aid ships but not trade. Discuss the effects upon the town of Buenos Aires.

Se
an
40

19. Tell the class about the opening up of the town to trade in 1778. Have pupils look up the estimated population of Buenos Aires in 1778. Ask: What would be likely to happen to the population growth in the next years?

"S

t Buenos Aires looked like in n you tell from this drawing ze? about activities carried	Lindop, Understanding Lat. Am., p. 320.
anish explorers thought that the k: Why do you think they might were they looking for?	
ne early attempts to establish a ding the way in which Spanish sed by Indians and later colon-	Lindop, Understanding Lat. Am., pp. 320-321.
ish sent goods to South America and how the port was used later de. Discuss the effects upon .	See description in Hall, Land and People of Argentina, pp. 39-40. Also see background paper.
opening up of the town to trade ok up the estimated population of sk: What would be likely to hap- owth in the next years?	"Student Almanac."

S. Draws inferences from pictures.

S. Tests hypotheses against data.

S. Sets up hypotheses.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Migration involves the movement of culture and material objects to other parts of the world and results in changing these areas.

D. The
not

1. A
th
Sp
la
es
fo
ga

2. Th
Sp
na

3. Th
pa
ha
fr

from pictures.

against data.

s.

ical environment
ultural values,
level of technol-

s the movement
terial objects
the world and
ng these areas.

D. The early settlers in the region were herders, not tillers of the soil

1. A line of forts was built along the edge of the Salada Slough to guard against Indians. Spanish families were given large grants of land north of the Slough, and they established estates known as estancias. They built houses for workers who became their herders or gauchos.

2. The estancia owners substituted herds of Spanish cattle, horses and sheep for the native South American animals.

3. The Spanish did not try to extend their land past the forts and out of the Slough; they had enough land and they needed protection from the Indians.

Project a drawing of what Buenos Aires looked like around 1850. Ask: How does the town compare with that in 1700? How many years have passed while these changes took place?

20. Read aloud a quotation from Hall describing the difficulties of unloading goods and passengers at Buenos Aires before the new present-day harbor was dredged and built. Discuss: Were you correct in your earlier ideas about the harbor? What effect would this lack of a good harbor have upon Buenos Aires? What might be done to improve the situation?

21. Tell pupils about how early settlers set up estancias and raised livestock. Project a map showing the border of settlement as late as 1850. Have pupils identify the slough. (Use another map if necessary). Tell pupils about forts. Ask: Why do you think they were built? Why would most of those living on the land remain north of the forts?

Buenos Aires looked like a- es the town compare with that have passed while these changes	Lindop, Understanding Lat. Am., p. 321.
om Hall describing the difficul- nd passengers at Buenos Aires y harbor was dredged and built. t in your earlier ideas about would this lack of a good har- s? What might be done to im-	Hall, Land and People of Argentina, p. 95.
ly settlers set up estancias oject a map showing the border 1850. Have pupils identify the if necessary). Tell pupils o you think they were built? iving on the land remain north	James, Latin Am., p. 327.

S. Sets up hypotheses.

G. Migration involves the movement of culture and material objects to other parts of the world and results in changing those areas.

G. Man changes the character of the earth.

S. Draws inferences from pictures..

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. People in most societies of the world depend upon people who live in other communities, regions, and countries for goods and services and for markets for their goods.

4. Some o
animal
native
etatio

IV. We look at B

A. Today Buen
people, an
lation. T
region wit
vegetables

1. The cit
factori

2. The cit
carries
city in

4. Some of the seeds brought in with the Spanish animals spread in this area and drove out the native bunch grass; before long the grass vegetation showed marked differences.

IV. We look at Buenos Aires and the humid pampas today.

A. Today Buenos Aires has a population of 4,274,641 people, and the pampas have a fairly dense population. The region has become an agricultural region with the production of wheat and corn and vegetables, etc. as well as continued herding.

1. The city is a modern city with skyscrapers and factories.

2. The city has an excellent man-made harbor and carries on more foreign trade than any other city in the western hemisphere but New York.

e movement of
bjects to
rld and results
as.

cter of the

pictures..

st data.

environment
al values,
of technol-

es of the
le who live
regions, and
d services
eir goods.

22. Tell pupils about the demarcation between kinds of grass at the Slough line. Look at this line in relationship to a settlement map. Ask: What might account for the difference in type of grass? Now tell pupils about the introduction of European seeds.

23. Have a pupil tell the class about how and when Argentina won its independence from Spain.

24. Project photos of Buenos Aires today. Ask: What do these pictures show about how the city has changed since 1850?

    Have pupils read descriptions of the city today to check on these inferences and find out more things about what the city is like.

    Ask: What kinds of factories are found in the city? How else do people make a living besides working in factories? Where do you think the factories might get the raw materials they need?

    You may wish to supplement other reading with tables or brief written excerpts about some of the plants which process goods coming from other parts of Argentina than from the pamaps. Ask: Do you think these products needed might be found on the pampas? Why or why not?

arcation between kinds of grass at this line in relationship to What might account for the difference. Now tell pupils about the ineds.

ass about how and when Argentina Spain.

ires today. Ask: What do how the city has changed since

ons of the city today to check nd out more things about what

ies are found in the city? living besides working in factories k the factories might get the

See maps and photos in Gartler, et.al., Understanding Argentina, pp. 58, 61, 53, 54, 15. Nat'l Geog., Nov. 1967, pp. 666-667, 672-673, 678-679, 684,688. Hall, Land and People of Argentina, ff. p. 65; Borchert and McGuigan, Geog. of the New World, pp. 418, 421; Lindop, Understanding Lat. Am., pp. 319, 322, 323, 325; Filmstrip: Farm Lands in Southern S. Am., Eyegate, frame 11.

nt other reading with tables or ut some of the plants which other parts of Argentina than you think these products he pampas? Why or why not?

Hall, Land and People of Argentina, ch. 17; Lindop, Understanding Latin Am., pp. 322-326.

S. Interprets tables.

S. Sets up hypotheses.

S. Interprets tables.

S. Generalizes from data.

S. Sets up hypotheses.

S. Interprets tables.

S. Generalizes from data.

S. Sets up hypotheses.

G. The significance of location depends upon cultural developments both within and outside of an area.

3. The area h

4. Most of th
Argentina

B. A number of f
the city and

1. As Europe
grew, Euro
be grown i

3. The area has a dense population.

4. Most of the population of the city and of Argentina are of European descent.

ion de-
lopments
f an area.

B. A number of factors account for the growth of the city and of the population within the pampas.

1. As Europe became urbanized and as population grew, Europeans needed more food than could be grown in Europe.

25. Project a table showing changes in the population in Buenos Aires from 1580 (when it was founded) to the present day. Or have a pupil prepare a graph to illustrate these changes. Ask: What happened to the population growth after 1855? What might have brought about such growth?

26. Project a table showing area, population, population density, and urban population of different Latin American countries. Ask: Where does Argentina rank in terms of area? population? What proportion of its population lives in cities? Now figure out for pupils (or with them) 60 per cent of the total population of Argentina. Compare with the total population living in Buenos Aires and its metropolitan area. Ask: What proportion of the urban population lives in this one metropolitan area? (About 5 million people live in Greater Buenos Aires. About 13 million live in urban areas in Argentina.)

27. Give pupils figures or a table showing the division of population in Argentina among: (a) those of European descent who were born in Argentina, (b) European immigrants, (c) those of Indian or Negro or mixed descent. Ask: How does this division compare with the population of other countries studied thus far? Why do you think there are more people of European descent here than in the other Latin American countries? (Make guesses at this point.)

28. Give pupils a table to show the increase in population in Europe during the 19th century and tell them about the rapid urbanization of Europe at this time (or show figures which they can interpret). Ask: How might these population changes in Europe affect Argentina? (If necessary, ask pupils what would happen to food production in Europe as a result of urbanization then and what would be

es in the population in
it was founded) to the
prepare a graph to illus-
hat happened to the popu-
at might have brought a-

Early figures can be found in teacher's edition of Lindop, Understanding Lat. Am., pp. 321, 320.

population, population den-
different Latin American
Argentina rank in terms of
rtion of its population
out for pupils (or with them)
lation of Argentina. Compare
ing in Buenos Aires and its
proportion of the urban pop-
ropolitan area? (About 5
r Buenos Aires. About 13
Argentina.)

Peterson, Latin America.

showing the division of
: (a) those of European
ntina, (b) European immi-
r Negro or mixed descent.
compare with the population
us far? Why do you think
pean descent here than in
tries? (Make guesses at

See background paper and James, Latin Am., pp. 297, 339.

e increase in population
ury and tell them about
pe at this time (or show
et). Ask: How might these
ffect Argentina? (If neces-
ppen to food production in
tion the and what would be

G. People in most societies of the world depend upon people who live in other communities, regions, and countries for goods and services and for markets for their goods.

S. Sets up hypotheses.

a.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

b.

G. Changes in one aspect of a culture will have effects on other aspects; changes will ramify, whether they are technological, in social organization, in ideology, or whatever else is a part of the cultural system.

c.

G. Soil in a particular place is affected by vegetation and by how man treats the soil.

G. Nature changes the character of the earth through biotic processes.

d.

S. Applies previously-learned concepts and generalizations to new data.

2. The
win
wir
mor

s of the
e who live
egions,
and serv-
r their

nvironment
l values,
of technol-

a culture
her aspects;
ether they
ocial organ-
r whatever else
al system.

ace is affected
man treats

acter of the
ocesses.

ed concepts
ew data.

a. The British, who became interested in getting beef from Argentina, did not like the taste of the Argentine beef which came from scrub catte. They shipped in new varieties of high-grade cattle.

b. These new cattle needed better feed than the scrub grass, and they needed to be transported to market rather than driven to market. (They could not stand the long drives with little feed or water that the scrub cattle could.)

c. The farmers discovered that alfalfa was the best feed crop which could be grown. However, it needed cultivation, and harvesting and so required more workers.

d. Immigrants were brought in, particularly from Italy; by 1914 there were over two million immigrants living in the country.

2. The development of agricultural machinery, windmills, well-drilling machinery and barbed wire made it possible to farm the pampas much more extensively.

the effect of increased population upon demand.)

29. Tell the class that the British were the first Europeans to become really interested in Argentina as a source of food. Why might this be so? (Show a map of Europe and tell the class that Britain was the first to industrialize.) Then explain briefly why the British did not like the Argentine beef. Ask: If you had been the British what might you have done in this situation?

    Tell the class about the introduction of British cattle. Ask: How do you think these cattle would stand up under long drives across the pampas with little feed or water as compared to the way in which the scrub cattle stood up? Why?

    Now tell the pupils that these new cattle did not like the scrub grass of the country and that the farmers introduced alfalfa. Ask: Why might it be good besides being a good feed crop? (Review from Phoenix unit or have a pupil give a report on alfalfa's properties.) Point out that alfalfa needs to be harvested. Ask: What effect would the introduction of alfalfa as a feed crop have upon the need for workers? Tell pupils that land-owners had to import many workers from Europe. Ask: How might they persuade them to come? Now tell the class about the arrangements for tenants.

30. Ask: What would be needed besides a demand for food to get a big increase in production on the pampas? (Ask further questions as needed to bring out the need for machinery, for fences if farmers wished to keep new cattle from mixing

G. Machinery and power make possible greater production per person.

G. New innovations and discoveries open up new fields of production and make possible an increased output in old fields of production.

S. Draws inferences from pictures.

G. Grain crops are raised more easily on relatively flat lands than in hills and mountains.

G. Improved transportation facilities make possible wider and bigger markets as well as better and less costly access to resources.

G. A change in situation brings about a corresponding change in the use of a site.

G. Man changes the character of the earth.

S. Applies previously-learned concepts and generalizations to new data.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

3. The in
ble to

4. The Bri
sums o
the pa
cheapl
diffic
tions.
market
extens

5. As trade
on the P
meet the
the trad

a. Facto
grain

ake possible
r person.

scoveries
production
ncreased out-
roduction.

pictures.

d more easily
nds than in

n facilities
nd bigger mar-
and less
rces.

brings about
in the use

ter of the

rned concepts
new data.

row up if
which are
ing community
onal region.

3. The invention of refrigeration made it possible to preserve meat and ship it to Europe.

4. The British, who wanted food, invested huge sums of money in building railroads across the pampas. These roads could be built cheaply on the flat land, whereas roads were difficult to build because of the soil conditions. The railroads made it possible to market the grains and beef from a much more extensive area than before.

5. As trade with Europe increased and agriculture on the Pampas prospered, Buenos Aires grew to meet the needs of the hinterland and to handle the trade.

   a. Factories sprang up to process the meat and grains.

with the scrub cattle, of railroads for transportation, for refrigeration, etc.

Project photos or have pupils examine photos in books showing use of machinery in agricultural activities on pampas. Discuss: How did such machinery enable people to make use of more land in the pampas region? What effect does use of such machinery have upon costs of production? Why was it important that the pampas are relatively flat?

31. Show the class a railroad map of Argentina today. Ask: Who might have been willing to help build the roads? Why? Then tell pupils about the British investments.

32. Point out that trade with Europe increased greatly and that agriculture on the Pampas prospered. Ask: What would be the effects upon Buenos Aires? Why? What kinds of industries would be needed? What other kinds of services would be likely to develop to serve the people on the pampas?

railroads for transportation,

pils examine photos in books
in agricultural activities on
d such machinery enable people
in the pampas region? What
achinery have upon costs of
nportant that the pampas are

e.g. See Borchert and McGuigan, Geog. of the New World, p. 419 for use of machine in harvesting wheat.

map of Argentina today. Ask:
ng to help build the roads? Why?
e British investments.

For a railroad map of S. Am., see James, Latin Am., p. 53. For a railroad map of the pampas, see James, p. 338.

Europe increased greatly and
ampas prospered. Ask: What
Buenos Aires? Why? What kinds
eded? What other kinds of serv-
evelop to serve the people on

G. Man changes the character of the earth.

G. Improved transportation facilities make possible wider and bigger markets as well as better and less costly access to resources.

G. Cities which become big trading centers tend to grow up where there is a break in transportation and so where goods must be moved from one type of transportation to another or from one company's transportation facilities to those of another company.

S. Draws inferences from maps.

S. Applies previously-learned concepts and generalizations to new data.

G. Factories need good transportation facilities, but large cities with many factories and large numbers of people also attract improved transportation facilities.

G. Improved transportation facilities make possible wider and bigger markets as well as better and less costly access to resources.

b. Sto
both
peop

c. Expe
harb
made
the

b. Stores and banks, etc., developed to supply both the people in the hinterland and the people coming into the city.

c. Expensive dredging created an excellent harbor, and the building of extensive docks made it easy to transport goods to and from the city by ship.

33. Remind pupils of the problems of landing and taking o
goods by ship during the 19th century. Ask: Why wou
there be increased pressure upon the government to im
prove the harbor and build more docks? Have pupils r
about the work done to make good port and dock facili
for Buenos Aires. (Perhaps show a picture of dredgin
Ask: What effects would this work be likely to have
upon the city?

34. Again have pupils examine a railroad map of Argentina
What does thi map show about the position of Buenos
Aires in relationship to railroad lines? Why do you
think the railroad centered on this city rather than o
one of the other cities in Argentina?

35. Remind pupils about what they learned earlier about th
problems of road building in Argentina. Now project a
photo of a modern highway. Ask: How did the people

24-

of landing and taking on century. Ask: Why would pon the government to im- re docks? Have pupils read ood port and dock facilities. how a picture of dredging.) work be likely to have	e.g. See Lindop, Understanding Latin Am., pp. 322. Filmstrip: Argentina - The Land and People, Eyegate, frame 24; Whittemore, et.al., The U.S., Canada, and Lat. Am., pp. 36-37 of section on Lat. Am.
railroad map of Argentina. the position of Buenos road lines? Why do you n this city rather than on gentina?	For a railroad map of S. Am., see James, Lat. Am., p. 53; For a railroad map of the pampas, see James, p. 338.
learned earlier about the Argentina. Now project a sk: How did the people	Photo on p. 327 of Lindop, Understanding Lat. Am., or on p. 39 of section on Lat. Am.

G. Changes in one aspect of a culture will have effects on other aspects; changes will ramify, whether they are technological, in social organization, in ideology, or whatever else is a part of the cultural system.

S. Generalizes from data.

S. Applies previously-learned concepts and generalizations to new data.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

G. Types of agriculture in a region depend upon man's cultural values, perceptions, and level of technology as well as upon climate, soils, and topography.

C. The humid p
ricultural

1. The Past
east; o
for live

2. The Alfa
part of
grown, b
There is

a. Immig
shar
raise
feedi

ure
cts;
ey
gan-
er
sys-

cepts
a.

ore
area
e are
ries
ions.

on de-
, per-
gy as
d top-

C. The humid pampas are divided into four main agricultural regions.

1. The Pastoral district is located in the southeast; over 80 per cent of the land is used for livestock ranching.
2. The Alfalfa-wheat district is in the western part of the pampas. There is more alfalfa grown, but wheat is the main commercial crop. There is also considerable livestock ranching.
    a. Immigrants have been brought in to farm on shares for limited period of years. They raise wheat for income and alfalfa for feeding the cattle.

overcome the earlier handicaps? Why would it be wor
the time and effort to build such roads today but no
fifty years ago? Have a pupil find out how many mil
of improved road are found in Argentina. He should
pare it with that in the U.S., but should point out
ferences in the size of the two countries.

36. Project a map showing the extent of settlement in th
humid pampas in 1875. Compare it with the earlier m
of settlement in 1850. What had happened during thi
period? Why was so much of the pampa still unsettle
Now project a map showing the extent of use of the p
pas today. How does this use compare with that in 1
(Perhaps use a population density map to illustrate.

37. Remind pupils of what they have read about the intro
tion of beef cattle from England. Show pictures of
ent-day ranching on the pampas.

38. Tell the class that landowners have begun to grow a
ber of crops. Show a map of the different agricultu
regions of the pampas. Locate each of the regions a
describe it brielfy. Or project a series of maps sh
production of different crops and products and have
try to regionalize. Compare with a map showing regi

Have pupils look at the map or maps more carefully.
Do you think there would be a sharp line marking of
border between different kinds of agriculture? Why
why not? Perhaps project a map showing land use on
estancia in the pastoral region. Ask: Do you think
is fair to call this a region then? (Review meaning
reg ion and generalization about it.) Be sure that p

dicaps? Why would it be worth
uild such roads today but not
pupil find out how many miles
nd in Argentina. He should com-
U.S., but should point out dif-
the two countries.

in Whittemore, U.S., Canad
and Lat. Am.

extent of settlement in the
ompare it with the earlier map
What had happened during this
of the pampa still unsettled?
the extent of use of the pam-
use compare with that in 1875?
density map to illustrate.)

James, Lat. Am., p. 327 (map
of 1875); pp. 278, 338 (maps
of today).

ey have read about the introduc-
England. Show pictures of pres-
pampas.

Hall, Land and People of Ar
tina, ff. 65; Lindop, Unde
ing Lat. Am., p. 33.

wners have begun to grow a num-
of the different agricultural
ocate each of the regions and
project a series of maps showing
rops and products and have pupils
are with a map showing regions.

James, Latin Am., p. 338 (
of agriculture).

ap or maps more carefully. Ask:
be a sharp line marking off the
kinds of agriculture? Why or
a map showing land use on one
region. Ask: Do you think it
egion then? (Review meaning of
about it.) Be sure that pupils

For a map of an estancia, see
Thoman and Batton, Focus on
Geographic Activity, pp. 56-57;
or Wittemore, et.al., U.S.,
Canada, Latin Am., p. 24 of sec-
tion on Lat. Am.

G. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, landforms, etc.

S. Sets up hypotheses.

b. Then th
stock r
and fin
again.

3. The Maize
Rosario an

a. Maize i
cattle
Europe

b. This re

1) Pean
oil
olive
duri

2) Recei
place
produ

c. This re
on large
line abo
tend bec

4. The intensi
trict is fo
Aires, with
the outer p

a. These fa
city.

b. The soil
ing vege
section

b. Then the land is turned over to livestock ranching for a period of years and finally over to alfalfa and wheat again.

3. The Maize district centers on the port of Rosario and is in the northern pampas.

   a. Maize is not grown to feed hogs and cattle but rather to dry and ship to Europe as a poultry feed.

   b. This region also has some other crops.

      1) Peanuts have been raised for vegetable oil for cooking as a substitute for olive oil which was not available during World War II.

      2) Recently sunflowers have largely replaced peanuts since their oil can be produced less expensively.

   c. This region also has livestock ranching on large estates, although there is a line above which ranching does not extend because of cattle ticks.

4. The intensive truck, dairy, and fruit district is found around the city of Buenos Aires, with some vegetable gardens within the outer parts of the city.

   a. These farms have a good market in the city.

   b. The soil and climate are suited to raising vegetables and fruit, and the southern section is particularly suited to dairying.

realize that livestock raising is important in wheat and maize regions. (Relate to what pupils have learned about bringing workers and the incentives for tenant farmers.) Also ask: Why do you think that land close to Buenos Aires which was once used for livestock is now used for growing vegetables, fruit, and raising dairy cattle for dairy products.

Show the class pictures of sugar cane, oranges, and grapes growing in Argentina. Have pupils try to figure out where. They should set up hypotheses to check against data given in later reports.

ing is important in wheat and
what pupils have learned
the incentives for tenant
o you think that land close
nce used for livestock is
bles, fruit, and raising
ucts.

sugar cane, oranges, and
. Have pupils try to figure
up hypotheses to check
reports.

Filmstrip: Argentina-Resources Industries, and Products, Eyegate, Frames 7,9,10.

S. Draws inferences from maps.

S. Sets up hypotheses.

S. Tests hypotheses against data.

S. Generalizes from data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. People in most communities are dependent upon other communities, regions, and continents for goods and services and for markets for their goods.

G. Machinery and power make possible greater production per person.

S. Draws inferences from maps.

S. Interprets tables.

D. T
o
t
b
p

E. Bu
ce
ti
th
ma
vi
co

aps.

t data.

nvironment
l values,
of tech-

es are
munities,
for goods
kets for

possible
erson.

ps.

D. The land holding system remains basically one of large owners with many tenant farmers, although some of the large estates have been broken up by inheritance laws and selling to pay debts.

E. Buenos Aires has become the transport and processing center for the other regions in Argentina as well as for the Pampas. It serves these regions but also benefits from the raw materials produced in them. The city also provides some other central functions for the country.

39. Project a drawing showing an estancia. Ask q designed to have pupils figure out something on the estancia. Now have a pupil report on l estancia today. Afterwards discuss: How doe an estancia compare with life on American far have studied? How does landholding compare?

40. Have four students prepare and present illust ports on the other regions in Argentina outsi pampas. They should show each region on a ma photos of the region to illustrate its charac show maps and discuss the climate, point out sources and their uses, and describe how they ported to Buenos Aires and processed, used or from there. After each report, discuss: How Buenos Aires serve this region? How does it b from this region?

41. Tell pupils about the Quebracho forests of the region. Describe the tree and its uses. Loca source on the map. Ask: Where do you think would be taken to be sold?

42. Have pupils examine a population density map f tina. Where do the largest number of people does the density outside of the pampas compar in the rural parts of the pampas? Now give pu

estancia. Ask questions re out something about life upil report on life on an iscuss: How does life on on American farms which we olding compare?	Gray, Exploring American Neighbors, p. 202 (drawing). Hall, Land and People of Argentina, ch. 16. Lindop, Understanding Latin America, pp. 333-334. Whittenne, et. al., The U.S., Canada, Latin America, pp. 20-25 of section on Latin America.
d present illustrated re- Argentina outside of the h region on a map, show trate its characteristics, mate, point out its re- escribe how they are trans- ocessed, used or shipped t, discuss: How does n? How does it benefit	Lindop, Understanding Latin America, pp. 328, 335-341. Whittemore, et.al., U.S., Canada and Latin America, pp. 40-45 of section on Latin America. Gartler, et.al., Understanding Argentina. Filmstrip: Argentina - The Land and People, Eyegate. Argentina - Resources, Industries, and Products, Eyegate.
tho forests of the Chaco d its uses. Locate the re do you think the tannin	James, Latin America, pp. 315-316.
ion density map for Argen- umber of people live? How he pampas compare with that pas? Now give pupils fig-	Gantler, et.al., Understanding Argentina, p. 22. (map). See figures in James, Latin America, p. 296.

S. Tests hypotheses against data.

G. Population is distributed unevenly over the earth's surface; many of the land areas are thinly populated.

S. Applies previously-known concepts and generalizations to new data.

S. Interprets tables.

G. The world is a community of interdependent countries.

G. People in most communities are dependent upon other communities, regions, and continents for goods and services and for markets for their goods.

S. Interprets tables.

S. Generalizes from data.

data.

uneven-
e; many
ly pop-

concepts
w data.

of inter-

s are
unities,
or goods
ets for

F. Buenos Aires is the chief center for Argentina's trade with other parts of the world. Argentina is heavily dependent upon its exports and imports. The United States also benefits from trade with Argentina.

ures on the proportion of the country which falls within the humid Pampas (22%) and the proportion of the population living there (about 65%). Ask: What might be the reason for the distribution of population?

Have pupils look at figures on a percentage of the country's railroads in the Pampas region (70%), the percent of industrial production (85%), the precentage of the area used in cereal and flax production (86%), the percentage of total cattle production (63%), etc. Do pupils wish to modify their earlier hypotheses?

43. Have pupils study a map of Argentina and use the key to locate the capital city. Ask: How would the fact that Buenos Aires became the capital city affect the growth of the town?

44. Project a table showing the percentage of Argentine exports going to different countries and the percentage of imports coming from different countries. Ask Which country buys the most goods from Argentina? Why do you think it buys more than the U.S. does? Which country sells the most goods to Argentina? Why do you think this might be true?

James, Latin America, pp. 292, 361.

45. Project a table showing the proportion of Argentine production which is exported. Compare with a similar table for the U.S. Or just give pupils rough proportions or a graph comparing these proportions. Ask: Which country is more dependent upon its exports? How can you explain this fact?

G. People in most communities, are dependent upon other communities regions and continents for goods and services and for markets for their goods.

S. Generalizes from data.

S. Interprets tables.

S. Generalizes from data.

46. Tell pupils that U.S. imports almost all of its asbestos from Argentina. Locate its source of supply on map. Ask: Why do we need asbestos? If necessary, have pupils use reference books to find out.

47. Have a pupil find out what else and how much we import from Argentina. Then have pupils locate sources of these products on a map.

48. Hold a summarizing discussion in which pupils are asked to compare the pampas with the other parts of Argentina and with other regions which they have studied in South America.

49. Project a table showing per capita income or calories per person etc. in South America. Ask pupils to compare living levels of those living in Argentina with those living in other parts of South America. What might account for this difference?

almost all of its asbestos ource of supply on map. ? If necessary, have pu- ind out.

See Lindop, Understanding Latin America, p. 339.

se and how much we import pils locate sources of these

in which pupils are asked other parts of Argentina they have studied in South

apita income or calories ica. Ask pupils to compare in Argentina with those America. What might ac-

Peterson, Latin America, pp. 95, 101.

168
01

Grade 5
Unit: Latin America
Sub-Unit : Case Study on Manaus

1

RESOURCE UNIT 7/4

These materials were developed by the Project Social Studies Center of the University of Minnesota under a special grant from the U.S. Office of Education. (Project No. HS-045)

1968

OBJECTIVES

GENERALIZATIONS

1. Phenomena are distributed unequally over the earth's surface, resulting in great diversity or variability from one place to another. No two places are exactly alike.
   a. Population is distributed unevenly over the earth's surface; many of the land areas are thinly populated.
2. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.
   a. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.
3. Rainfall is affected by distance from bodies of water, wind direction, temperature, and physical features which block winds carrying moisture.
   a. Winds which have been warmed and have picked up moisture crossing large bodies of warm water tend to cool as they rise over mountains and so drop their water on the side of the mountain from which they come.

4. Soil in
the typ
climate
glacier
well as

   a. Soil
   in p
   depo

5. Vegetat
precipi

   a. Vege
   fect

6. Differi
rainfal
number c

7. Man uses
of his c
level of

   a. Man c

   b. Types
   upon
   and l
   clima

   c. The s
   on cu
   outsi

OBJECTIVES

uted unequally over
resulting in great
ity from one place
laces are exactly

ributed unevenly
urface; many of the
nly populated.

ed by the distance
vation, distance
s, prevailing winds,
which block winds
ns.

asonal differences
rt by distance from
rature ranges are
quator than further

by distance from
direction, tem-
features which
moisture.

een warmed and have
crossing large
er tend to cool as
ntains and so drop
side of the moun-
ey come.

4. Soil in a particular place is affected by the type of basic rock in the region; the climate; vegetation; erosion; wind, glaciers, and rivers which move soil; as well as by how man treats the soil.
    a. Soil in a particular place is affected in part by rivers which move soil and deposit it in the area.
5. Vegetation is affected by temperature, precipitation, and soil.
    a. Vegetation and what can be grown are affected in part by soil.
6. Differing crops need differing amounts of rainfall and differing temperatures and number of frost free days in order to grow.
7. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.
    a. Man changes the character of the earth.
    b. Types of agriculture in a region depend upon man's cultural values, perceptions and level of technology as well as upon climate, soils, and topography.
    c. The significance of location depends upon cultural developments both within and outside of a country or region.

d. A number of factors -- climate, surface features, natural resources, accessibility, and history affect settlement and growth patterns.

  1) Within certain limitations, moist areas tend to have a higher population density than dry areas. However, population distribution reflects man's values and his technology as well as physical features of an area.

e. Physical features of an area may set limitations upon man's activities, given a specific level of technology.

f. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, etc.

  1) Forests can be used to obtain lumber and other timber products such as paper, turpentine, nuts, etc., depending upon the kinds of trees in the forest.

8. Specialization of individuals, regions, and countries makes for interdependence.

  a. People in most communities depend upon people in other communities and countries for goods and services and for markets for their goods.

-- climate, sur-
al resources, ac-
tory affect set-
atterns.

nitations, moist
e a higher popu-
an dry areas.
on distribution
lues and his tech-
physical features

an area may set
's activities,
el of technology.

roduced better
another because
, transportation
sources, access
skills, etc.

ed to obtain lum-
per products such
ne, nuts, etc.,
kinds of trees

duals, regions,
interdependence.

ities depend up-
mmunities and
nd services and
goods.

b. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

c. An urban center based on only one commodity will thrive only so long as that commodity thrives.

d. Diversification of production makes a company or a region less dependent upon price fluctuations for one product or upon the supply of specific resources.

9. Towns need means of shipping goods in and out; they are likely to grow up where transportation is good, particularly where different types of transportation meet.

   a. Improved transportation facilities make possible wider and bigger markets as well as greater and less costly access to resources.

   b. Cities which become big trading centers tend to grow up where there is a break in transportation and so where goods must be moved from one type of transportation to another or from one company's transportation facilities to those of another company.

10. Output is affected by the quality as well as by the quantity of resources; quality is affected by access as well as by fertility, richness, etc.

OBJECTIVES

A. IS CURIOUS ABOUT SOCIAL DATA.

S. Compares areas with known areas.

S. Interprets map symbols in terms of map legend.

S. Draws inferences from pictures.

S. Sets up hypotheses.

G. Towns need means of shipping goods in and out; they are likely to grow up where transportation is good, particularly where different types of transportation meet.

G. Cities which become big trading centers tend to grow up where there is a break in transportation and so where goods must be moved from one type of transportation to another or from one company's transportation facilities to those of another company.

OUTLINE OF CONTENT

I. Manuas is a town
point for produce

A. The Amazon bas
est river syst

1. The Amazon
than the ba

2. The Amazon
and it has
one of these
ties into th
ies meander
ward some 8
the tributar
which then f
Just before
plain throug
again. The
flows slowly
sea level.
so that sea-
Manaus; thos
can go as fa

OCIAL DATA.

th known areas.

nbols in terms of

from pictures.

s.

of shipping goods
re likely to grow
ation is good,
different types
meet.

e big trading
ow up where
n transporta-
goods must be
e of transpor-
r from one com-
ion facilities
r company.

OUTLINE OF CONTENT

I. Manuas is a town which serves as a collecting point for produce in the Amazon basin.

A. The Amazon basin is a huge area on the greatest river system in the world.

1. The Amazon basin is huge -- much larger than the basin of the Mississippi.

2. The Amazon River is the largest in the world, and it has many tributaries. Manaus is on one of these tributaries just before it empties into the Amazon River. These tributaries meander through plains which extend westward some 800 miles. The plains narrow as the tributaries combine into one great river which then flows some 1,000 miles to the sea. Just before the river reaches the sea, the plain through which it flows broadens out again. The Amazon River is an old river which flows slowly. Manaus is only 100 feet above sea level. However, the river is deep enough so that sea-going vessels can go up way past Manaus; those requiring less than 14 feet can go as far as Iquitos in Peru.

11. Economic output is affected by the quality of labor or labor skills as well as by the quantity of labor.
    a. Output is affected by the quantity of labor.
        1) The supply of labor is affected by the proportion of the population able and willing to work and by the number of hours they are willing to work.
12. Output can be increased by a more efficient combination of productive resources (by the way in which production is organized.)
13. New inventions and discoveries open up whole new fields of production or make it possible to increase production and/or reduce costs of productions.
14. Other things being equal, the price of a good rises when the demand for the goods exceeds the supply for the good.
15. Culture may change by a process of diffusion

SKILLS

1. Sets up hypotheses.
2. Gains information by studying films.
3. Draws inferences from pictures.
4. Compares areas with known areas.

5. Int
leg

6. Dra
dif

7. App
ger

8. Tes

ATTITU

1. Is

2. App
but

3. Is
con
ten
lig

ted by the qual-
ills as well as

the quantity

r is affected by
the population
o work and by the
ey are willing to

by a more effi-
ductive resources
duction is organ-

veries open up
uction or make
production
roductions.

, the price of a
nd for the goods
he good.

process of dif-

dying films.

tures.

areas.

5. Interprets map symbols in terms of map legend.

6. Draws inferences from a comparison of different map patterns of the same area.

7. Applies previously-learned concepts and generalizations to new data.

8. Tests hypotheses against data.

ATTITUDES

1. Is curious about social data.

2. Appreciates and respects cultural contributions of other peoples.

3. Is sceptical of the finality of knowledge; considers generalizations and theories as tentative, always subject to change in the light of new evidence..

TEACHING PROCEDURES

1. Have a pupil locate the Amazon river basin on a map.

   Give pupils a word association test in which they are t respond with the first three words they think of when y say a word. Then give them the name Amazon Basin. Discuss their responses.

2. Use transparencies to illustrate the size of the Amazo rain forest region as compared to an area of known size s as the United States.

3. Have a pupil make a graph comparing the length of the A azon with that of other great rivers of the world. Then have pupils examine the map of the basin to note the nu ber of tributaries which flow into the river. Locate Manaus on a tributary.

   Have pupils look at a physical map of the basin and describe the physical features through which the tributaries and the river proper flows. Us a plastic overlay t point out floodplains.

   Give pupils the elevation figure for Manaus. What does this figure show about the river? Show a picture of th Amazon below Manaus. Ask: What does this picture indicate about the area and about possibilities for transpo tation?

   Read aloud quotations about the width and amount of wat in the river. What does this indicate about the possibilities of shipping on the river? (Discuss depth and lack of rapid current, etc.) Show on a map the distance to which ocean shipping of different sizes can go up th river. Discuss: What possible advantages do you see i the location of Manaus?

cate the Amazon river basin on a map.

ord association test in which they are to
first three words they think of when you
en give them the name Amazon Basin. Dis-
onses.

ies to illustrate the size of the Amazon
ion as compared to an area of known size such
tates.

e a graph comparing the length of the Am-
f other great rivers of the world. Then
ine the map of the basin to note the num-
es which flow into the river. Locate
utary.

at a physical map of the basin and de-
cal features through which the tributar-
r proper flows. Us a plastic overlay to
lains.

elevation figure for Manaus. What does
about the river? Show a picture of the
aus. Ask: What does this picture indi-
rea and about possibilities for transpor-

tions about the width and amount of water
hat does this indicate about the possi-
ping on the river? (Discuss depth and
rent, etc.) Show on a map the distances
hipping of different sizes can go up the
What possible advantages do you see in
Manaus?

MATERIALS

Map of South America.

Some figures are found in Bishop, Brazil, p. 30.
Physical map of Amazon basin.
Sheet of acetate to place over map. China marking pencil.
Price, Amazing Amazon, pp. 8, 10-16.

S. Applies previously-learned concepts and generalizations to new data.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.

G. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.

S. Applies previously-learned concepts and generalizations to new data.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Rainfall is affected by distance from bodies of water, wind direction, temperature and physical features which block winds car-

B. The Am
precip
most p
from o

learned concepts
to new data.

ainst data.

cted by the dis-
tor, elevation,
water bodies,
nd physical
k winds from

sonal differ-
in part by
quator; tem-
smaller near
rther away

learned concepts
to new data.

ainst data.

d by distance
r, wind direc-
nd physical
k winds car-

B. The Amazon Basin is marked by high humidity and precipitation but not by the great heat which most people expect, Temperatures vary little from one month to the next.

4. Have pupils note the latitude of the basin. Ask: On the basis of the location what do you think might be true about the temperature of this region? Do you see any other factors as shown on this physical map which would make you change your minds? (If necessary call attention to elevation, distance from ocean, wind directions, source of water in river, etc.)

   Have pupils check their hypotheses against a temperature chart.

5. Compare temperature between the Amazon region and a midwestern United States city to dispel the misconception of extreme heat in that part of the world. Also quote Price on the effect of river water on the temperature.

6. Have pupils look at the physical map once more. Ask: What do you think might be true about precipitation in this region? Why? Where do you think most of the precipitation would come from? Have pupils check their ideas against a rainfall map, a map of wind systems, an a textbook.

titude of the basin. Ask: On on what do you think might be ure of this region? Do you see own on this physical map which our minds? (If necessary call distance from ocean, wind di- er in river, etc.)	Physical map of Brazil or South America.
hypotheses against a temper-	"Student Almanac"
een the Amazon region and a mid- ity to dispel the misconception part of the world. Also quote river water on the temperature.	"Student Almanac." Price, The Amazing Amazon, p. 19.
physical map once more. Ask: be true about precipitation in re do you think most of the pre- rom? Have pupils check their map, a map of wind systems, and	May, Brazil, p. 20; Gartler and Hall, Understanding Brazil, pl 12; Goode's World Atlas.

rying moisture.

G. Winds which have been warmed and have picked up moisture crossing large bodies of warm water tend to cool as they rise over mountains and so drop their water on the side of the mountain from which they come.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Soil in a particular place is affected by the type of basic rock in the region, the climate, vegetation, erosion, wind, glaciers, and rivers which move soil, as well as by how man treats the soil.

G. Vegetation and what can be grown is affected in part by soil.

G. Differing crops need differing amounts of rainfall and differing temperatures and number of frost free days in order to grow.

C. Although
course o
are leac
highly a
which re
new silt

warmed and
e crossing
ater tend to
mountains
r on the side
hich they

st data.

lace is af-
basic rock
mate, vegeta-
laciers, and
, as well as
soil.

n be grown
soil.

iffering
d differing
r of frost
grow.

C. Although there are many variations along the course of the Amazon, in general the soils are leached of organic substances and are highly acid. However, the flood-plains, which reach some width near the coast get new silt deposits each year.

Read aloud quotations about the rainstorms of the region, about the humidity, etc.

Lindcp
Americ

7. Ask: Suppose you were a farmer. What would be your chances of making a good living in this basin? Why? Let pupils set up hypotheses about agricultural possibilities, including the soil.

See ba
The Am

Read aloud quotations or give pupils information needed to check their hypotheses.

ainstorms of the re-	Lindop, Understanding Latin America, p. 415.
What would be your n this basin? Why? t agricultural possi-	See background paper. Price, The Amazing Amazon, p. 19.
ils information needed	

S. Gains information by studying films.

G. Vegetation is affected by temperature, precipitation, and soil.

G. People in most societies depend on people in other communities and countries for goods and services and for markets for their goods.

G. Vegetation is affected by temperaature, precipitation, and soil.

G. People in most societies depend on people in other communities and countries for goods and services and for markets for their goods.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

D. The basin
the uplan
Little su
in the tr
8,000 spe

E. There may
minerals,
has been

II. We look at M
guese. Many
we will focu

A. The Jiva
ing soci

B. The Jiva
given th
were nec

ing films.

tempera-
oil.

epend on
and
rvices
goods.

D. The basin is covered with huge trees except in the upland areas where there are savanna regions. Little sunglight filters through to the ground in the tropical rain forest. There are over 8,000 species of trees.

empera-
oil.

epend on
and
rvices
goods.

E. There may be considerable oil and there are many minerals, but so far the only big development has been of manganese on the lower Amazon.

ronment
alues,
technol-

II. We look at Manaus before the coming of the Portuguese. Many Indian groups lived in the area, but we will focus upon one example, the Jivaro.

A. The Jivaro were primarily a hunting and gathering society.

B. The Jivaro practiced some shifting agriculture; given this level of technology, such practices were necessary because of the soil.

8. Show photos of the rain forest in the basin or show a film on the Amazon basin. Ask: Why do you think there are such dense forests? How do you think these resources might be used? Quote Price on the importance of some of the tree oils to the U.S.

9. Quote Thomas E. Dewey on the importance of Manganese to the free World in wartime. Read aloud Price's comments on its importance and show the location of the mine in Brazil. Have a pupil report on the uses of manganese.

Tell the class that Americans are exploring for oil in the region. Wny do they think they might find it here? Have a pupil investigate the way in which oil is formed and report to the class. He might assume the role of an adviser to the American oil company and explain why he thinks it might want to spend money exploring for oil in this region.

10. Point out that there were many groups of Indians living in the Amazon basin before white men came. However, the class will focus upon one group which was fairly typical of how people lived in the area.

Prepare a chart to show how the Jivaro lived in the Manaus area prior to the coming of the white man. Use titles to illustrate how the people lived. Then have pupils read brief descriptions of shifting agriculture. Discuss Do you think this type of agriculture was poorly or well-

forest in the basin or show a
n. Ask: Why do you think there
How do you think these resources
rice on the importance of some of
s.

Photos of rain forest. Or film on river basin. Price, The Amazing Amazon, p. 4; May, Brazil, pp. 19, 49.

n the importance of Manganese to
ne. Read aloud Price's comments
now the location of the mine in
eport on the uses of manganese.

Price, The Amazing Amazon, pp. 2-3; Gartler and Hall, Understanding Brazil, p. 56.

icans are exploring for oil in
think they might find it here?
the way in which oil is formed
He might assume the role of an
oil company and explain why he
spend money exploring for oil in

e many groups of Indians living
re white men came. However, the
e group which was fairly typical
he area.

how the Jivaro lived in the Man-
ming of the white man. Use titles
ople lived. Then have pupils
of shifting agriculture. Discuss:
f agriculture was poorly or well-

For descriptions of shifting agriculture, see Lindop, Understanding Lat. Am., p. 418; Kohn and Drummond, World Today, p. 257.

A. APPRECIATES AND RESPECTS CULTURAL CONTRIBUTIONS OF OTHER PEOPLES.

G. Culture may change by a process of diffusion.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

C. The sh
to new

D. The Ji
in the
white

E. These
to use
men, i
ing ma

III. We look a

A. By 187
rubber
aus gr
rubber
city.

1. Man
ing

2. Mon
nes

3. Man
had
cit

B. Manaus
until

C. The shifting agriculture required frequent moves to new villages.

D. The Jivaros were fierce fighters; their presence in the basin discouraged early exploration and white settlement.

E. These and other Indians in the Basin had learned to use many of the plants for medicines; white men, including American doctors, are now borrowing many of these discoveries.

III. We look at Manaus in the period 1875-1910.

A. By 1875 Brazil was the world's chief exporter of rubber. Due to its strategic river position, Manaus grew to be a major concentration point for rubber shipments. By 1910 it was a prosperous city.

1. Many large buildings were built here, including the famous Manaus Opera House.
2. Money was squandered by the exploitive businessmen at a fantastic rate.
3. Manaus became a prosperous urban center. It had electricity before some large European cities did.

B. Manaus existed earlier but did not grow much until the demand for rubber grew.

suited for the area? Why?

Describe briefly the characteristics of the tribe as fighte
Ask: If you had been the first white men in Portugal, what
would have been your feelings about exploring and settling
this region where the Jivaros lived?

11. Read aloud sections from Price on the Indians' use of plant
for medicines. Point out that probably these discoveries
go back long before white men arrived.

12. Read aloud a description of Manaus in the period from 1875-1910, and point out the importance of rubber to Manaus. Ask
Why would Manaus benefit by a sudden interest in the produc
tion of rubber along the upper Amazon? Look again at a map
showing the location of Manaus as the class discusses this
question.

13. Now put a short timeline on the chalkboard or on the bulletin board to show what had happened in this area prior to the coming of the rubber boom. It should show when the Portuguese first came to Brazil, when Manaus was founded,

eristics of the tribe as fighters.
rst white men in Portugal, what
s about exploring and settling
s lived?

ce on the Indians' use of plants
at probably these discoveries
n arrived.

Price, The Amazing Amazon,
ch. 12.

Manaus in the period from 1875-
rtance of rubber to Manaus. Ask:
a sudden interest in the produc-
er Amazon? Look again at a map
us as the class discusses this

Price, The Amazing Amazon,
pp. 209-210, 212-214.

the chalkboard or on the bul-
happened in this area prior
boom. It should show when the
zil, when Manaus was founded,

G. The significance of location depends upon cultural developments both within and outside of a country or region.

S. Sets up hypotheses.

G. Forests can be used to obtain lumber and other timber products.

G. New inventions and discoveries open up whole new fields of production.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Other things being equal, the price of a good rises when the demand for the good exceeds the supply for the good.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

1. For abo
gained
zon Bas
for exp

2. Manaus
the lat
mote se
ernment

3. The Ama
from wh
ber. H
conside
mand un

    a. In l
    of v
    with

    b. The
    chin
    afte

    c. At t
    grew
    sole

4. The dema
in the a
land si
wealthy

1. For about three hundred years after Portugual gained control of Brazil, Manaus and the Amazon Basin were left almost untouched except for expeditions for gold.

2. Manaus was established by the Portuguese in the late 17th century, but it remained a remote settlement and served mainly as a government outpost until the early 1800's.

3. The Amazon basin contained the heavea tree from which latex can be taken for making rubber. However, this possible resource was not considered much of a resource or in much demand until the early 1800's.

   a. In 1840 Goodyear discovered the process of vulcanizing rubber so that it would withstand extremes of heat.

   b. The industrial revolution introduced machines which needed rubber; this need grew after the invention of the auto.

   c. At the time that the demand for rubber grew, the Amazon basin was almost the sole place where the rubber trees grew.

4. The demand for rubber led to a land boom in the area around Manaus. People bought land sight unseen, in the hopes of becoming wealthy from the production of rubber.

and when rubber production began around Manaus. Point out that the trees from which rubber is made had been growing in this area all of the time. Ask: Why do you think so many years passed before production became important here?

14. Have a pupil give a report on Goodyear's discovery of vulcanization. He should explain why this discovery was important. Ask: What effect would this discovery have upon the demand for rubber? Why?

15. On the timeline, indicate some of the dates connected with the Industrial Revolution. Point out some of the machines which were discovered which needed rubber. Ask: What effect would the invention of many new types of machines, including the auto, have upon the demand for rubber?

16. Point out to the class that the only known trees from which rubber could be made at the time were found in the Amazon basin. Ask: Suppose you had been a businessman during this period. Why might you have tried to buy land around Manaus? Now tell pupils about how people bought land sight unseen. Why? What effect would this rush for land have upon Manaus?

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Physical features of an area may set limitations upon man's activities, given a specific level of technology.

S. Sets up hypotheses.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Sets up hypotheses.

G. Specialization of individuals, regions, and countries makes for interdependence.

. The popul

5. Railroads
but were
tinued to

IV. We look at Mana

A. Both the bas
importance a

B. By 1923 Braz
cent of the
in the Amazo
another part
duce rubber

. The population of Manaus increased greatly.

5. Railroads were begun from the coast to Manaus but were never completed; transportation continued to be by river steamer.

IV. We look at Manaus and the Amazon basin in 1923.

   A. Both the basin and Manaus had declined in importance and in population.

   B. By 1923 Brazil produced only about 8 per cent of the world's rubber. The rubber boom in the Amazon Basin had collapsed, because another part of the world had begun to produce rubber more efficiently.

---

gainst data,

of an area
s upon man's
a specific
y.

cal environ-
is cultural
s, and level

individuals,
ries makes
e.

17. Tell the class that people began to build railroads from the coast inland to Manaus. Why might they wish to do so? Now tell them that the railroads were never completed. Ask: Why do you think they were never completed? Read aloud a description of the problems and cost of trying to build the railroad.

    Price, The Amazing Amazon, Ch. 14.

    Ask: What other kinds of land transportation might be built? Would it be any easier to build such transportation? What would this mean about the kind of transport which the people of Manaus would have to use?

18. Give pupils a brief summary description of Manaus in 1923. Point out that ocean liners no longer sailed up to Manaus, that the population had declined drastically, that the opera house had closed, that many rich people had lost all of their money, etc. Also point out that the Indian population in the Amazon region had declined from about 2 million (when the white men arrived) to less than 300,000 by this time. Have pupils suggest possible reasons for this decline.

19. Give pupils figures on Brazil's share of the world rubber production in 1923. Ask: What had happened? Why do you think it had dropped so much? Let pupils set up possible hypotheses for testing.

G. An urban center based on only one commodity will thrive only so long as that commodity thrives.

G. The significance of location depends upon cultural developments both within and outside of a country or region.

G. A number of factors--climate, surface features, natural resources, accessibility, and history affect settlement and growth patterns.

G. The supply of labor is affected by the proportion of the population able and willing to work and by the number of hours they are willing to work.

G. Output can be increased by a more efficient combination of productive resources (by the way in which production is organized.)

G. Man changes the character of the earth.

1. In 187
seedli
the Ma
ish pl

2. There w
agement
Amazon,

a. Work
tran
trac
and
were

1) T

2) L

3) T
s

4) T
t

ed on only
hrive only
odity

location
l develop-
d outside
on.

--climate,
tural re-
ty, and his-
nt and growth

is affected by
e population
work and by
they are will-

sed by a more
n of produc-
he way in
organized.)

acter of the

1. In 1876 an Englishman smuggled out rubber seedlings which were eventually taken to the Malay peninsula and planted on British plantations.

2. There was no concern for scientific management of the rubber plantations in the Amazon, as there was in Southeast Asia.
    a. Workers were recruited in Manaus and transported to the owner's forest tract. There they collected the latex and made it into rubber balls which were picked up by the owner's ship.
        1) Trees were cut at will.
        2) Land was not prepared for new trees.
        3) There was little care taken to insure crop longevity.
        4) There was little attempt to improve the trees through experimentation.

20. Assign a research project on Henry Wickam and the growth of the rubber plantations in Sumatra and Malaya. At this point the pupil should report only on how Wickam got the trees and finally how plantations got started in Malaya and Sumatra. Ask: Why did Wickam and others think that the trees would grow there? (Have pupils examine climatic maps to answer this question.) Also ask: What effect do you think this move to start rubber plantations here would have upon the Amazon basin and Manaus?

P
p

21. Have pupils read brief descriptions of how rubber was made from the trees in Brazil. (Also show picture of the trees.) Now read aloud a description of how the early owners of the land around Manaus got their rubber. Discuss: How efficient do you think this system would be for growing rubber? What problems might arise?

Li
Am
Pr
pp
Ma
Wh
Ca
pp
La

ect on Henry Wickam and the growth
ons in Sumatra and Malaya. At this
report only on how Wickam got the
lantations got started in Malaya
did Wickam and others think that
ere? (Have pupils examine climatic
estion.) Also ask: What effect do
start rubber plantations here would
sin and Manaus?

Price, The Amazing Amazon, p. 222.

descriptions of how rubber was
Brazil. (Also show picture of the
a description of how the early
nd Manaus got their rubber. Dis-
you think this system would be
at problems might arise?

Lindop, Understanding Latin America, p. 419.
Price, The Amazing Amazon, pp. 208-209, 214-216.
May, Brazil, pp. 54-57.
Whittemore, et. al, U. S., Canada, Latin America, pp. 130-131 of section on Latin America.

G. Output can be increased by a more efficient combination of productive resources (by the way in which production is organized.)

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Population is distributed unevenly over the earth's surface; many of the land areas are thinly populated.

G. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement patterns.

G. Output is affected by the quantity of labor.

G. Some things can be produced better in one place than in another because of climate, resources, access, people's skills, etc.

b.

c

c

c

3. The
fin
are
oth
tre

a.
w

b.
t

c.
p
c

d.
i

4. Plan
cent
cent
of

b. When the rubber tree was taken to the Malaya peninsula, the trees were planted in orderly rows and the managers of plantations used scientific management to improve the trees, the collection of latex, the curing of rubber, etc. As a result, trees in Malaya began to yield 10 to 17 pounds of rubber per tree as against 3 pounds per tree in Brazil.

3. The chief problem in the Amazon basin was to find large numbers of cheap laborers; this area could not compete with some of the other tropical areas to which the rubber tree was taken.

   a. The population density in Southeast Asia was already higher than in the Amazon basin.

   b. Better employee provisions were made for the workers in S.E. Asia.

   c. Superior plantation design meant that fewer people were needed to work a given number of trees in S.E. Asia.

   d. The treatment of the Amazon workers resulted in the death of many Indians.

4. Plantations in Southeast Asia produced 10 per cent of the world's rubber by 1910, 60 per cent by 1914, and 93% by 1924. Brazil's share of world production dropped to 7% by 1924.

22. Now have the pupil who investigated Wickam and the rubber plantations of Malaya and Sumatra continue his report. He should tell the class about how the plantations differed from those in the Amazon basin. Afterwards discuss: What advantage do you think the plantations in Southeast Asia would have over those in the Amazon area?

    Illustrate with graphs or tables the advantage of greater rubber productivity per unit in S.E. Asia.

23. Have students consult population maps of each rubber region (the Amazon and S.E. Asia). If possible use maps showing density in the period of the early 1900's. If not, use modern maps and indicate that population density was slightly higher then in the basin than in 1923 but that it has risen again since 1923.

    Point out that one of the problems in producing rubber in the Amazon basin was too few workers. Why might there have been fewer workers in the Amazon basin than in S.E. Asia? Get pupils to set up hypotheses. Ask: What did you learn about the way Indians were treated during the rubber boom? How might this have affected the number of people living in the region around Manaus? Now read aloud or summarize explanations of the relatively small number of workers and the decline in population.

24. Have a pupil prepare a graph to show the increase in the proportion of world rubber grown in Southeast Asia from 1910 to 1924. Have the class summarize reasons for the changes.

G. Output can be increased by a more efficient combination of productive resources (by the way in which production is organized.)

S. Sets up hypotheses.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

G. Within certain limitations, moist areas tend to have a higher population density than dry areas. However, population distribution re-

5. As a resu
boom, work
existence

   a. Follow
   the wo
   the Am
   able i

   b. Some w
   agricu
   were s
   voted
   gion.

V. We look at Mana

   A. Manaus is a
   public trans
   hospitals, s
   commercial c

      1. Manaus' p
      has a popu
      lation of
      very low.

y a more
productive
which pro-

5. As a result of the collapse of the rubber boom, workers were left without a means of existence, and millionaires became paupers.
    a. Following the collapse of rubber, many of the workers drifted to the cities along the Amazon; however, few jobs were available in these towns.
    b. Some workers settled on land to attempt agriculture, but as late as 1920 there were scarcely a hundred square miles devoted to this work in all the Amazon region.

ironment
values,
f tech-

V. We look at Manaus today.
    A. Manaus is a modern city with good sanitation, public transportation facilities, electricity, hospitals, schools, factories, etc. and is a commercial center.
        1. Manaus' population is growing again; it now has a population of over 175,000. The population of the surrounding region remains very low.

s, moist
er popula-
as. How-
tion re-

25. Ask: What do you think the workers who had been gathering curing, and collecting the rubber would do once the rubbe production declined rapidly in the Amazon basin? If pupils suggest that they might move to Manaus to work, ask what kinds of jobs they might get there. If pupils canno think of other possibilities, ask: How did Indians make living earlier before the white man came? Could they go back to living in the same way? Suggest that it might be important to find out how people use this basin today.

26. Project pictures of Manaus today. Have pupils try to figure out as much about the city as they can from these pictures. Then read aloud a description or descriptions of Manaus today.

    Ask: How does this Manaus compare with that of 1910? of 1923? How has transportation changed? Point out that Manaus has no real road transportation leading to other places, although two roads have been started. How can pupils account for this fact?

27. Have pupils examine once more a population density map of the basin and of South America as a whole. How does the population in the basin compare with that in other parts of Brazil? South America? Why do you think the

the workers who had been gathering,
the rubber would do once the rubber
pidly in the Amazon basin? If pu-
might move to Manaus to work, ask
y might get there. If pupils cannot
lities, ask: How did Indians make a
the white man came? Could they go
same way? Suggest that it might be
how people use this basin today.

naus today. Have pupils try to fig-
he city as they can from these pic-
d a description or descriptions of

Photos in Lindop, Understanding Lat. Am., p. 419; Pam Am. Union, Amazon, p. 12; Nat'l. Geog., Sep't., 1962, pp. 328-331. Descriptions in Price, The Amazing Amazon, p. 250.

naus compare with that of 1910? of
rtation changed? Point out that
d transportation leading to other
oads have been started. How can pu-
fact?

ce more a population density map
uth America as a whole. How does
basin compare with that in other
America? Why do you think the

Population density map of Brazil and/or South America. (e.g. May, Brazil, p. 31 or Gartler and Hall, Understanding Brazil, p.44.

flects man's values and his technology as well as physical features of an area.

S. Sets up hypotheses.

G. Improved transportation facilities make possible wider and bigger markets as well as greater and less costly access to resources.

S. Interprets map symbols in terms of map legend.

S. Sets up hypotheses.

S. Test hypotheses against data.

G. Improved transportation facilities make possible wider and bigger markets as well as greater and less costly access to resources.

S. Draws inferences from a comparison of different map patterns of the same area.

S. Draws inferences from pictures.

2. Manaus is
routes.

a. Manaus
necting
however

b. Manaus
stimula
mains f
is much

. Manaus
lous par
It is pa
open up

3. Manaus is a
upper Amazo
where.

and his tech-
ysical features

ion facilities
and bigger mar-
ter and less
ources.

ls in terms

nst data.

ion facilities
and bigger mar-
ter and less
ources.

n a comparison
terns of the

n pictures.

2. Manaus is situated on good river and air routes.

   a. Manaus still has no good road system connecting it with other parts of Brazil; however two roads have been started.

   b. Manaus has built huge floating docks to stimulate river traffic; this traffic remains fairly small, but it is growing and is much larger than in 1923.

   . Manaus is a hub for air traffic into various parts of Brazil and other countries. It is part of a big government effort to open up more parts of Brazil by plane.

3. Manaus is a trade center where products of the upper Amazon are collected and shipped elsewhere.

population density may be so low? Remind pupils of the generalization they drew during the overview of the U.S. about the relationship between population densities and moistures in areas. Do they need to modify this generalization? How?

28. Review with pupils the extent to which ships can travel up the Amazon river. Ask: Why do they think there may be little traffic, even though there is more now than in 1923? Ask pupils to note the floating docks in the picture of Manaus. Why might the people build such docks? Read aloud a description of them in explanation. (Point out that they were built during the rubber boom.)

29. Project an airline map of Brazil. Ask: What do you notice about Manaus on this map? Why would the government try to develop air travel across the Amazon basin? Why would they use Manaus as a central hub of such traffic?

    Perhaps read aloud brief descriptions of ways in which the government is building airstrips and of ways in which small planes are used to carry goods and travellers.

30. Project a series of maps from Deasey showing land use in the Amazon basin. Ask the class to consider the location of Manaus. Is it a good one to serve as a trading center for the valley now that the rubber boom has collapsed? Why or why not?

/ may be so low? Remind pupils of the
ey drew during the overview of the U.S.
nship between population densities and
s. Do they need to modify this general-

s the extent to which ships can travel
er. Ask: Why do they think there may
, even though there is more now than in
to note the floating docks in the pic-
Why might the people build such docks?
ription of them in explanation. (Point
e built during the rubber boom.)

Pan American Union, Amazon
p. 12.
Price, The Amazing Amazon,
p. 208.
Gartler and Hall, Understanding Brazil, p. 8.

e map of Brazil. Ask: What do you
us on this map? Why would the govern-
op air travel across the Amazon basin?
e Manaus as a central hub of such traf-

Webb, Brazil, p. 74.
Price, The Amazing Amazon,
pp. 22, 269 ff.
May, Brazil, p. 110.

d brief descriptions of ways in which
building airstrips and of ways in which
used to carry goods and travellers.

of maps from Deasey showing land use in
Ask the class to consider the location
a good one to serve as a trading center
/ that the rubber boom has collapsed?

Deasey, et. at., The World's Nations, p. 298.

S. Generalizes from data. a.

S. Sets up hypotheses.

G. Diversification of production makes a company or a region less dependent upon price fluctuations for one product or upon the supply of specific resources. b.

G. Forests can be used to obtain lumber and other timber products such as paper, turpentine, nuts, etc., depending upon the kinds of trees in the forest.

S. Sets up hypotheses. c.

G. Forests can be used to obtain lumber and other timber products

ction
ion less
ctua-
upon
esources.

otain
products
e, nuts,
kinds

tain
roducts

a. Brazil now produces only 2 percent of the world's rubber; however, this rubber has a steady demand because of its special qualities.

b. The most valuable commodity today in the Amazon basin is the Brazil nut; as in the case of rubber, it is merely collected and not cultivated.

   1) Workers are sent into the forests to collect nuts which have fallen.
   2) Nuts are shipped out via the rivers just as rubber was.
   3) Today Brazil is the world's largest producer of Brazil nuts.
   4) Even nut production is threatened, as plantations in Malaysia begin experimenting with the cultivation of this product.

c. Tree products are shipped abroad for other kinds of oils needed for a variety of purposes.

Have pupils look at a picture of boats taking produce to Manaus. Ask: What products are being collected an taken to Manaus?

31. Give pupils the figure for the present proportion of world rubber production which comes from Brazil. What has happened to this proportion since 1923? How might the people in this area (In Manaus and surrounding are live if rubber production is not greater? Let pupils set up hypotheses to test.

32. Read aloud excerpts from Price's description of Araujo operations near Manaus. How has he diversified his pr duction activities? (Be sure pupils understand the me ing of the term.)

33. Summarize briefly the way in which Brazil nuts are bei harvested in the Amazon basin. Ask pupils to compare this method with the way rubber was harvested. What problems might arise? Now tell them about some of the

34. Ask: How might a landowner who has many trees make a living besides cutting them down for lumber and using nuts for food? Let pupils make some guesses. Perhaps

a picture of boats taking produce
hat products are being collected and

Bishop, Brazil, p. 68.

ure for the present proportion of
tion which comes from Brazil. What
s proportion since 1923? How might
area (In Manaus and surrounding areas)
uction is not greater? Let pupils
o test.

from Price's description of Araujo's
aus. How has he diversified his pro-
(Be sure pupils understand the mean-

Price, The Amazing Amazon,
ch. 19.

he way in which Brazil nuts are being
azon basin. Ask pupils to compare
e way rubber was harvested. What
e? Now tell them about some of them.

andowner who has many trees make a
ing them down for lumber and using
pupils make some guesses. Perhaps

Price, The Amazing Amazon
pp. 282-284.
Bishop, Brazil, pp. 74-75.

such as paper, turpentine, nuts, etc., depending upon the kind of trees in the forest.

G. People in most communities depend upon people in other communities and countries for goods and services and for markets for their goods.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, etc.

S. Gains information by studying films.

A. IS CURIOUS ABOUT SOCIAL DATA.

G. Phenomena are distributed unequally over the earth's surface, resulting in great diversity or variability from one place to another. No two places are exactly alike.

d. Tree p
where

4. Manaus hac
well as t

a. It now
oil fr
Peru.

b. it has
kinds c
making

B. Indians still
the river; th
riculture and
products.

entine, nuts,
n the kind of

unities depend
r communities
oods and ser-
ts for their

ainst data.

roduced bet-
on in another
resources,
es, access to
markets,
t.

studying films.

IAL DATA.

buted unequally
face, resulting
r variability
other. No two
like.

d. Tree products are also shipped elsewhere to be made into medicines.

4. Manaus had developed some industries as well as trade functions.

   a. It now has an oil refinery to process oil from the Amazon basin section of Peru.

   b. It has processing plants for various kinds of tree oils and nuts and for making wood fuels and plywood.

B. Indians still live in small villages along the river; they engage in some shifting agriculture and in the collection of forest products.

ask them if their mothers buy any food made from tree products. Now quote or summarize some author's description of the rich varieties of tree products in the Amazon basin and the uses to which they can be put.

35. Ask pupils to think back to the descriptions of Araujo's operations. What was he doing besides collecting and selling raw products? What other kinds of processing plants have they learned about? What kinds might be set up in or close to Manaus? After pupils have suggested some, give them a list.

    Now tell the class that Manaus also has an oil refinery. Ask: Where would it get the oil? Have pupils examine a map of oil fields in South America to try to figure out Then read aloud the explanation from the Pan American Union pamphlet.

36. Show the filmstrip, Geography of the Amazon, to give students an overall picture of the region today.

37. Have a group prepare a report on their "journey" up the Amazon from the delta to Iquitos. Report types of people encountered and activities noted on the trip.

    Or have pupils read about life in an Indian village in the Amazon today. Discuss.

any food made from tree pro-
e some author's description
products in the Amazon basin
n be put.

May, Brazil, p. 64.

ne descriptions of Araujo's
g besides collecting and sell-
kinds of processing plants
t kinds might be set up in
ils have suggested some, give

For a map of oil fields in South America see Kohn and Drummond, World Today, p. 272. For explanation, see Pam Am. Union, Amazon, p. 13.

s also has an oil refinery.
oil? Have pupils examine
America to try to figure out
on from the Pan American

of the Amazon, to give stu-
ne region today.

Filmstrip: Geography of the Amazon.

on their "journey" up the
tos. Report types of people
ted on the trip.

e in an Indian village in

Lindop, Understanding Latin America, p. 418.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Soil in a particular place is affected in part by rivers which move soil and deposit it in the area.

S. Sets up hypotheses.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. New inventions and discoveries open up whole new fields of production or make it possible to increase production and/or reduce costs of production..

G. Output can be increased by a more efficient combination of productive resources (by the way in which production is organized.)

C. Some white
as small la
as well as

D. Several new
the rubber
have had so

1. In 1927
over $2\frac{1}{2}$
east of
ber. Th
were att
scattere
be immun
hilly an
eroded.
in 1930.

2. The Ford
the Amaz
labor.

st data.

lace is af-
rs which move
the area.

environment
al values,
of technol-

coveries open
production
increase pro-
costs of pro-

d by a more
of productive
in which pro-

C. Some white people have settled along the river as small landowners engaged in farming trees as well as other crops.

D. Several new attempts by Americans to develop the rubber industry failed, but their efforts have had some lasting effects on the region.

1. In 1927 the Ford Motor Company purchased over $2\frac{1}{2}$ million acres about 400 miles southeast of Manaus in order to grow it own rubber. They planted trees, but these trees were attacked by disease. Individual trees scattered among many other varieties tend to be immune to such diseases. The area was hilly and not good for machines, and the soil eroded. The company gave up the plantation in 1930.
2. The Ford company moved to a new location in the Amazon basin but could not get needed labor. They experimented with bringing in

38. As a side-light--students may be interested in working on a project about the plant and animal life of the Amazon region, or on some of the tribal cultures living there. The Amazon is a fascinating place in the minds of young people. Every effort should be made to bring out the color of the region as well as the main concepts chosen.

39. A bulletin board display of a map showing the Amazon and the regions of tribal groups, towns, and commercial activity would point out the importance of the river to all aspects of life in the area.

40. Read aloud a brief description of the farming activities of a pioneer in the region close to the river near Itacoatiara. Ask: Why is this man able to grow such good crops on this soil? Why isn't his soil leached as is so much of the soil in the Basin? If necessary, read aloud descriptions of flooding along river and then ask this question again.

41. Tell the pupils that the Ford Company made two efforts to develop profitable rubber plantations in Brazil during the period from 1927 to 1945. Ask: Why do you think this company might want to set up rubber plantations? If you had been the Ford managers, where would you have looked to get ideas about how to make these plantations profitable?

    Read aloud or tell pupils about the two Ford ventures. Afterwards discuss: Why couldn't Ford develop profitable plantations in the Amazon basin when such plantations are profitable in Southeast Asia?

ents may be interested in working on
ant and animal life of the Amazon
the tribal cultures living there.
ating place in the minds of young
should be made to bring out the
well as the main concepts chosen.

ay of a map showing the Amazon and
groups, towns, and commercial ac-
the importance of the river to all
area.

cription of the farming activities
gion close to the river near Itacoa-
his man able to grow such good
hy isn't his soil leached as is so
e Basin? If necessary, read aloud
ng along river and then ask this

Price, The Amazing Amazon, pp. 266-267.
Floods are described in Price, pp. 13-14.

he Ford Company made two efforts
rubber plantations in Brazil during
o 1945. Ask: Why do you think
t to set up rubber plantations? If
managers, where would you have
out how to make these plantations

Price, The Amazing Amazon, Ch. 16.

ils about the two Ford ventures.
hy couldn't Ford develop profitable
zon basin when such plantations are
t Asia?

G. Economic output is affected by the quality of labor or labor skills as well as by the quantity of labor.

imp
wou
tre
abl
ber
dur
fro
the
aft

3. Dur
wit
whi
cre
the

4. Alt
for
som
cha
the
pro

a.

b.

fected by the
abor skills
ntity of labor.

improved trees from the East Indies, which would produce more rubber than the native trees. However, these new trees proved unable to resist some of the diseases of rubber trees. Ford continued the plantation during World War II, when rubber was cut off from the East Indies. However, he turned the land over to the Brazillian government after the war.

3. During the war, the U.S. government cooperated with Brazil in many investigations of ways in which wild rubber production could be increased. Their efforts had little success at the time.

4. Although the Ford Co. and U.S. government efforts did not prove successful, they did have some lasting effects and have stimulated changes which may bring about growth both in the rubber production and in other kinds of production in the basin

   a. The Ford Co. and the U.S. government began and encouraged further the development of sanitary and other health measures; as health conditions improve, more people will be willing to go into the area to settle.

   b. Ford experimented with bringing in improved varieties of rubber trees from the East Indies; although they were not resistant to diseases in Brazil, further experiments have shown that grafting with native stock can produce a disease-resistant as well as a better-producing tree.

42. Tell the class about the U.S. efforts to increase wild rubber production. Ask: Why do you think the U.S. spent so much money on this? Why do you think the project failed?

43. Have a pupil find out how the Brazillian government has followed up on some of the developments begun by Ford and suggested by U.S. workers during World War II. He should report on health activities and on new developments at rubber plantations. Discuss: How would such health activities affect this region? Why might some of the rubber developments bring about increased production and profits? Tell the class briefly about some of the qualities of Brazillian rubber which leads to a small but steady demand.

he U.S. efforts to increase wild k: Why do you think the U.S. spent Why do you think the project	See Price, The Amazing Amazon, p. 228.
how the Brazillian government has the developments begun by Ford and ers during World War II. He should ities and on new developments at iscuss: How would such health ac- egion? Why might some of the rub- about increased production and ss briefly about some of the qual- bber which leads to a small but	Price, The Amazing Amazon, pp. 230-236.

S. Sets up hypotheses.

G. Output is affected by the quality as well as by the quantity of resources; quality is affected by access as well as by fertility, richness, etc.

S. Applies previously-learned concepts and generalizations to new data.

G. Types of agriculture in a region depend upon man's cultural values, perceptions and level of technology as well as upon climate, soils, and topography.

G. New inventions and discoveries open up whole new fields of production or make it possible to increase production and/ or reduce costs of production.

G. Culture may change by a process of diffusion.

D. The Braz
experime
ing proc
are intr
working
be easie
to devel

1. They
and r
make

2. They
mills
able

3. The g
devel
along
grown

4. The g
who h
which
Jute h
area a
it.

the quality
ntity of re-
ffected by ac-
rtility, rich-

arned concepts
o new data.

in a region de-
ral values, per-
technology as
soils, and top-

scoveries open up
roduction or make
se production and/
oduction.

a process of dif-

D. The Brazillian government now has an agency to experiment with scientific improvement of existing products and the development of others. They are introducing some crops from other countries, working out ways of developing forests which will be easier to lumber, and encouraging new settlers to develop some of the products.

1. They are encouraging the cutting of trees and replanting with one variety of tree to make lumbering this tree worthwhile.

2. They are encouraging landowners to set up pulp mills where trees are too mixed for profitable cutting for lumber.

3. The government has encouraged some people to develop a rice economy in the flood plain along the river; a new town of Gurupi has grown up there.

4. The government brought in a Japanese expert who helped develop a new strain of jute plant which would grow well in the Amazon valley. Jute has now become an important crop in the area and factories have grown up to process it.

44. Ask: What problems did the wild rubber collector
because of the way trees were scattered? Remind
of the great variety of trees within any square m
Ask: Why would this create a problem for people
to cut trees for lumber? If such a problem could
come, what other disadvantages would the Amazon b
as a lumbering region? What advantages would it
(Discuss problems of transportation, location as
to markets, rapid growth of trees, etc.) Read al
tations about the rapid growth of trees.

45. Ask pupils if they know what pulp is? what plywoo
Make sure that they understand these terms. Now
Why might it be easier for a man who owns trees a
the Amazon to produce pulp and plywood than speci
types of lumber for the market?

Discuss: Suppose you owned a large area of trees
the river and had cut them all down for pulp to ma
wood. How could you now use your land to get more
able lumber off of it? Quote Price on what is be

46. Have a pupil investigate ways in which the governm
trying to bring about greater diversification of c
and the introduction of new crops and improved agr
tural methods. He should report to the class. Di
possible effects upon the Basin.

e wild rubber collectors have
ere scattered? Remind pupils
ees within any square mile.
e a problem for people wishing
lf such a problem could be over-
ages would the Amazon basin have
at advantages would it have?
portation, location as related
f trees, etc.) Read aloud quo-
owth of trees.

Price, The Amazing Amazon, pp. 280-281.

at pulp is? what plywood is?
tand these terms. Now ask:
a man who owns trees along
and plywood than specialized
rket?

l a large area of trees along
all down for pulp to make ply-
e your land to get more valu-
ote Price on what is being done.

See Price, The Amazing Amazon, pp. 284-85.

ys in which the government is
ter diversification of crops
crops and improved agricul-
eport to the class. Discuss
asin.

Price, The Amazing Amazon, pp. 238-39.

S. Interprets symbols on maps.

G. Man uses his environment in terms of his cultural values, perceptions, and level of technology.

E. Although the a
known mineral
developed on t
now the larges
in the Western
eral deposits
the Manaus are
ly as yet.

A. IS SCEPTICAL OF THE FINALITY OF KNOWLEDGE; CONSIDERS GENERALIZATIONS AND THEORIES AS TENTATIVE, ALWAYS SUBJECT TO CHANGE IN THE LIGHT OF NEW EVIDENCE.

s.

in terms
erceptions,

ITY OF
RALIZA-
TATIVE,
IN THE

E. Although the area around Manaus does not have known mineral deposits, manganese mining has developed on the lower Amazon. This mine is now the largest single producer of manganese in the Western Hemisphere. Oil and other mineral deposits may be discovered some day in the Manaus area which has not been explored fully as yet.

47. Remind pupils about what they have learned earl
the Manganese mine. Have them examine maps to
can find any other minerals in the basin. Have
oil maps again. Perhaps tell pupils that some
think the basin is "floating on oil," while oth
tle hope for finding much oil or many minerals
terior part of the basin. Ask: Why don't we k
about the resources of the basin? (Or why do y
these authors disagree?)

48. The film, Life in the Hot Rain Forest, is a goo
for the last part of the case study, because it
good review of life in the region and the assoc
ucts. As this film is viewed, pupils should tr
of factors which would allow greater population
this region. Are there any present now that wo
plicable?

49. Read aloud conflicting quotations about the pro
Amazon basin for future growth. Ask: What do
about its future? Why? What are the chief pos
open?

e learned earlier about
amine maps to see if they
e basin. Have them check
ils that some authors
il," while others see lit-
many minerals in this in-
Why don't we know more
(Or why do you think

For minerals maps, see Kohn, and Drummond, The World Today, pp. 272, 273.

rest, is a good source
dy, because it gives a
and the associated prod-
pils should try to think
ter population growth in
nt now that would be ap-

Film: Life in the Hot Rain Forest.

about the promise of the
Ask: What do you think
the chief possibilities

e.g. in Hanson, New Worlds Emerging, chs. 6-7; Price, Amazing Amazon, pp. 266-67, 279, 285-86, 296; James, Latin Am., p. 551; Pan Am. Union, Amazon, p. 19; Kohn and Drummond, World Today, p. 259.

BIBLIOGRAPHY

I. Books for Pupils

Bishop, Elizabeth, and the Editors of Life. Brazil (Life World Library). New York: Time, Inc., 1967 ed.

Gartler, Marion and George L. Hall. Understanding Brazil. River Forest: Laidlow, 1962.

Lindop, Edmond, et.al. Understanding Latin America. Boston: Ginn, 1966 ed.

May, Stella B. Brazil. Grand Rapids, Michigan: Fideler, 1966 ed.

Whittemore, Kathryn, et.al. The United States, Canada, Latin America. Boston: Ginn, 1962.

II. Articles and Booklets

National Geographic, September, 1962, pp. 328-331.

Pan American Union, Amazon, Washington, D. C.: Pan American Union, 1965.

Webb, Kempton. Brazil, (Today's World in Focus booklet.) Boston: Ginn, 1964.

III. Other Books

Deasey, et. al. The World's Nations. Philadelphia: Lippincott, 1958.

Hanson, Earl P. New Worlds Emerging. New York: Duell, Sloan and Pearce, 1949.

Kohn, Clyde and Dorothy Drummond. The World Today. New York: McGraw Hill, 196

James, Preston. Latin America. New York: Odyssey Press, 1959.

Price, Willard. Amazing Amazon. New York: Day, 1952.

168
c1

Grade Five
Unit: Latin America
7 Sub-unit -- Case Study on
Sao Paulo

RESOURCE UNIT 7/3

These materials were developed by the Project Social Studies Center of the University of Minnesota under a special grant from the U.S. Office of Education. (Project No. HS-045)

1968

OBJECTIVES

This unit should make progress toward teaching the

GENERALIZATIONS

1. Things can be located at specific points on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.
2. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.
3. Rainfall is affected by distances from bodies of water, wind direction, temperature, and physical features which block winds carrying moisture.
4. Soil in a particular place is affected in part by vegetation.
5. Vegetation and what can be grown is affected in part by soil.
6. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.
    a. The significance of location depends upon cultural developments both within and outside of a region or country.
    b. The
    sen
    lev
    has
    lim
    c. Typ
    pen
    cep
    upo
    d. Man
    ear
        1)
    e. Imp
    make
    kets
    cos
7. Certain
   more des
   velopmen
8. Some thi
   one plac
   climate,
   skills,

OBJECTIVES

ould make progress toward teaching the following:

ated at specific
th's surface, usually
bstract grid and
of latitude and longi-

fected by the distance
elevation, distance
dies, prevailing winds,
ures which block winds
tions.

ed by distances from
wind direction, temp-
cal features which
ng moisture.

ar place is affected
ion.

t can be grown is
y soil.

cal environment in
ral values, percep-
f technology.

ce of location de-
tural developments
d outside of a re-
y.

b. The topography of a region may present limitations, given a specific level of technology; however, man has learned to overcome many of these limitations.

c. Types of agriculture in a region depend upon man's cultural values, perceptions, and technology as well as upon climate, soils, and topography.

d. Man changes the character of the earth.

    1) Soil in a particular place is affected in part by how man treats the soil.

e. Improved transportation facilities make possible wider and bigger markets as well as greater and less costly access to resources.

7. Certain physical features of sites are more desirable than others for the development of a port city.

8. Some things can be produced better in one place than in another because of climate, resources, access, people's skills, etc.

a. A place needs cheap and rapid transportation in order to carry on much trade with other places.

b. Factories must have some form of power to run machinery.

1) Power for industry is obtained from a number of sources, including water power or steam and electricity produced by burning coal.

9. Specialization of individuals, regions, and countries makes for interdependence.

a. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

10. Every area on earth contains a combination of phenomena which share the space of places and regions. Some of these phenomena are closely interrelated, while other merely happen to be there and may have no causal dependence upon the others. Those phenomena which are tied together causally result in places and regions of distinctive character.

11. People tend to work hardest at those jobs or invest their money in those enterprises for which they will receive the greatest incentives (monetary and non-monetary).

12. A man's job opportunities are limited by his training and skills.

12. The
abi

SKILLS

1. Set

2. Dra

3. Int

4. Use

5. Int
leg

6. Dra
dif

7. App
gen

8. Test

9. Gene

10. Cons

ATTITU

1. Eva
effe

ap and rapid trans-
r to carry on much
places.

ve some form of
inery.

stry is obtained
of sources, in-
power or steam
y produced by

dividuals, regions,
or interdependence.

to grow up if they
which are needed
g community or for
al region.

contains a combina-
ich share the space
s. Some of these
y interrelated,
appen to be there
al dependence upon
henomena which are
ly result in places
nctive character.

hardest at those
money in those
h they will receive
ves (monetary and

ities are limited
skills.

12. The demand for goods is affected by the ability to pay as well as desire.

SKILLS

1. Sets up hypotheses.
2. Draws inferences from pictures.
3. Interprets graphs.
4. Uses atlas index to locate places.
5. Interprets map symbols according to map legend.
6. Draws inferences from a comparison of different map patterns of the same place
7. Applies previously-learned concepts and generalizations to new data.
8. Tests hypotheses against data.
9. Generalizes from data.
10. Considers alternative courses of action.

ATTITUDES

1. Evaluates conditions on the basis of their effects upon individuals as human beings.

OBJECTIVES

S. Uses atlas index to locate places.

G. Things can be located at specific points on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, prevailing winds, and physical features which block winds from certain directions.

G. Rainfall is affected by distances from bodies of water, wind direction, temperature, and physical features which block winds carrying moisture.

G. The topography of a region may present limitations, given a specific level of technology; however, man has learned to overcome many of these limitations.

OUTLINE OF CONTE

I. Sao Paulo, th
South America
Southeastern

A. Sao Paulo
the cliff
plain.

1. The cli
from th
of 2,80

2. Sao Pau
is only

B. Sao Paulo
its latitu
the high e

C. There is p
round the

cate places.

at specific
surface,
an abstract
terms of
.

st data.

d by the
tor, ele-
warm water
ds, and
h block
ections.

y distances
wind direc-
physical
inds carry-

gion may pre-
a specific
owever, man
e many of

OUTLINE OF CONTENT

I. Sao Paulo, the most rapidly growing city in South America, is located on the highlands of Southeastern Brazil.

   A. Sao Paulo is situated a short distance west of the cliff which drops down to the coastal plain.

      1. The cliff of the Serra do Mar rises sharply from the plains along the coast to a height of 2,800 feet.

      2. Sao Paulo is inland just a short distance and is only slightly lower than that.

   B. Sao Paulo has a relatively cool climate despite its latitude. Temperatures are moderated by the high elevation.

   C. There is plentiful rainfall in the region around the city.

TEACHING PROCEDURES

1. Have a pupils use an atlas index to locate Sao Pau
   a wall map of Brazil (or South America).

2. Now have pupils examine a physical map and try to
   scribe briefly in writing what they think the phys
   features around Sao Paulo would be like, what the
   perature would be like, and what precipitation wou
   like. Let them check their hypotheses about climat
   climatic charts.

3. Tell pupils about the sharp rise of the cliff from
   coastal plain. Show the map which shows the cliff
   both a road and railroad going up it. Ask: How e
   do you think it would be to build such transportat
   Now read aloud a description of the railroad. Wha
   ventions were needed to overcome the handicaps of
   topography?

	MATERIALS
atlas index to locate Sao Paulo on (or South America).	Wall map of Brazil or South America.
ne a physical map and try to des ting what they think the physical aulo would be like, what the tem- e, and what precipitation would be their hypotheses about climate against	Physical map of Brazil or S. America. (e.g., Whittemore, et.al., The U.S., Canada, Latin Am., pp. 100-101 of section on Lat. Am. Gartler and Hall, Understanding Brazil, pp. 4, 12. Lindop, Understanding Lat. Am., p. 385. For maps of Jan. and July temperature, see May, Brazil, p. 18. For rainfall maps, see Gartler and Hall, p. 12. For rainfall chart, see Whittemore, p. 106 of section on Lat. Am.
sharp rise of the cliff from the the map which shows the cliff and oad going up it. Ask: How easy be to build such transportation? ription of the railroad. What in- to overcome the handicaps of this	Lindop, Understanding Latin Am., pp, 401 (description), 402 (map). Or see Whittemore, et.al., U.S., Canada, Lat. Am., p. 110 of section on Lat. Am.

S. Interprets map symbols according to map legend.

S. Applies previously-learned concepts and generalizations to new data.

G. Soil in a particular place is affected in part by vegetation.

G. Vegetation and what can be grown is affected in part by soil.

S. Generalizes from data.

S. Sets up hypotheses.

G. The significance of location depends upon cultural developments both within and outside of a region or country.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

D. The origina
with some

E. Much soil i
fee, not sc

II. We look at Sao

A. The city ha
was not nea
in the near

B. Sao Paulo w
portant set
eral factor
crease in n

1. The s
region i

2. Gold and
in small
Paulo and
slightly
many peop

cording

d concepts
w data.

e is af-
ion.

e grown
oil.

ion de-
opments
f a re-

ironment
values,
technol-

D. The original vegetation was largely forests, with some grasslands.

E. Much soil in the region is very good for coffee, not so good for some other crops.

II. We look at Sao Paulo in 1883.

A. The city had a population of about 35,000 and was not nearly so important as the other cities in the nearby area. Streets were unpaved.

B. Sao Paulo was still just on the fringes of important settlements in Brazil. However, several factors were leading to a population increase in nearby regions.

1. The sugar plantations of the northeastern region in Brazil declined.

2. Gold and some other minerals were discovered in small quantities near the site of Sao Paulo and in much larger quantities just slightly north of Sao Paulo. This brought many people further south.

4. Project a vegetation map of Brazil or South America
What was the original vegetation like in this regio
What effect might such vegetation have upon the soi
in the region?

5. Ask: Can we speak of rich soils or good soils, wit
knowing what is grown? Quote James on the varying
of the soils in the region for different kinds of c

6. Have pupils check the population of Sao Paulo in 18
Compare with some town which they know. Also ask:
did Sao Paulo compare with the Buenois Aieres of 18
(some thirty years earlier)? What factors might exp
the difference?

7. Point out that the city was not nearly so important
many other towns in the nearby area. Ask pupils to
think of possible reasons. Then tell them about th
ulation distribution at this time (or show maps of

Have a pupil investigate the way in which the sugar
tations and gold hunters moved into the region some
north of Sao Paulo. Discuss: How would this affec
city?

Brazil or South America.
tion like in this region?
ation have upon the soil

James, Latin Am., pp. 44-45.

ils or good soils, without
e James on the varying value
or different kinds of crops.

James, Lat. Am., pp. 474-76.

tion of Sao Paulo in 1883.
they know. Also ask: How
he Buenois Aieres of 1850
What factors might explain

"Student Almanac."

not nearly so important as
by area. Ask pupils to
Then tell them about the pop-
time (or show maps of it).

Webb, Brazil, pp. 55-58.

way in which the sugar plan-
ed into the region somewhat
: How would this affect the

S. Applies previously-learned concepts and generalizations to new data.

S. Sets up hypotheses.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

S. Draws inferences from pictures.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Interprets graphs.

S. Generalizes from data.

3. There w
coffee
south i

III. We look at Sa

A. The city h
people and
in South A
of much de
found in m

1. Most of
into th
They ha
parts o

2. This re
populat
zil, bu
and Neg
bbod in

concepts
w data.

up if
ich are
commun-
ional

tures.

ironment
values,
technol-

3. There was a growing demand for coffee, and coffee plantations were beginning to come south into the region around Sao Paulo.

III. We look at Sao Paulo today.

A. The city has a population of about 4½ million people and is the most rapidly growing city in South America. It is situated in a region of much denser rural population than can be found in most parts of Brazil.

   1. Most of the people in this region have come into the area during the last 100 years. They have come from abroad and from other parts of Brazil.

   2. This region has a more predominately white population than some other sections of Brazil, but there is some mixture with Indians and Negroes and a number of people of mixed blood in neighboring areas.

8. Now tell the class about the coffee shops of England
the way in which coffee was being discussed as a cure
for many diseases. Why might people want to grow co
in Brazil? Where would they first try to grow it? (
areas already being farmed or in new areas?) Tell pu
how the coffee plantations were being pushed down int
the Sao Paulo region from places further north. Ask:
might the growth of coffee plantations affect the to

9. Project several photographs of Sao Paulo today. Ask:
What had happened to the size of this city? What ca
you tell about the city from these pictures?

10. Have a pupil prepare a graph to show the growth of th
population of Sao Paulo from 1883 until today. The p
pil might make another graph to show the growth of po
ulation in the state of Sao Paulo.

Tell pupils where most of the people came from and ab
the population composition. Compare the composition
the population with that of other places in South Ame
ca which pupils have studied so far.

out the coffee shops of England and
ee was being discussed as a cure
y might people want to grow coffee
d they first try to grow it? (In
rmed or in new areas?) Tell pupils
tions were being pushed down into
rom places further north. Ask: How
offee plantations affect the town?

graphs of Sao Paulo today. Ask:
he size of this city? What can
y from these pictures?

Gray, Exploring Am. Neighbors, p. 228; Webb, Brazil, pp. 36-37; Lindop, Understanding Lat. Am., p. 403; Gartler and Hall, Understanding Brazil, p. 25; Bishop, Brazil, p. 80; Nat'l. Geog., Sept., 1962, pp. 313, 315-318; May, Brazil, pp. 28,34,36.

graph to show the growth of the
o from 1883 until today. The pu-
graph to show the growth of pop-
f Sao Paulo.

James, Lat. Am., pp. 480-82.

of the people came from and about
tion. Compare the composition of
at of other places in South Ameri-
tudied so far.

G. Some things can be produced better in one place than in another because of climate, resources, access, people's skills, etc.

S. Interprets graphs.

S. Interprets map symbols according to map legend.

S. Sets up hypotheses.

G. Types of agriculture in a region depend upon man's cultural values, perceptions, and technology as well as upon climate, soils, and topography.

S. Tests hypotheses against data.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. People tend to work hardest at those jobs or invest their money in those enterprises for which they receive the greatest incentives (monetary and non-monetary).

B. Sao Pa
region
coffee
produc

1. In
est
gio
cof
cen
por

2. Cot
are

3. The
ing

4. The
reg
tod
duc

C. Sao Pa
Latin
the pr

1. The
ces
the

e produced better
n in another be-
, resources, ac-
kills, etc.

s.

ymbols according

es.

ture in a region
s cultural values,
technology as well
soils, and topog-

against data.

es.

against data.

rk hardest at
vest their money
ises for which
greatest incen-
nd non-monetary).

B. Sao Paulo is situated in a rich agricultural region which produces a large share of Brazil's coffee, as well as many other agricultural products.

1. In the rural areas of the state, the richest farmlands are in the former forest regions. The chief agricultural product is coffee. Indeed, this state is the coffee center of Brazil. Coffee is the chief export of the country.
2. Cotton is also an important crop in this area.
3. The grassland areas are used today for raising cattle.
4. There is some sugar cane produced in the region; it can be grown more cheaply here today than further north where it was produced first.

C. Sao Paulo is the largest industrial city in Latin America. Its industries were built from the profits of the coffee plantations.

1. There are a number of industries which process goods produced in the region around the city.

11. Have several pupils present a symposium on the producti of coffee on the fazenda. They should project photogra to illustrate their report. Or have all of the pupils read about coffee growing and life on a fazenda.

    Project a graph showing leading exports of Brazil. As How does coffee rank among other products?

12. Project a map showing land use in the state of Sao Pau Ask: What are the important products? Why do you thi these crops are grown there?

    Have several pupils use different reference books to check on the class' hypotheses.

13. Tell pupils that Sao Paulo is the largest industrial c in Latin America. Then have pupils try to figure out w kinds of industries might have grown up in Sao Paulo. G them a list against which to check.

    Ask: Where would people have gotten the money to buil these factories? How did the people around Sao Paulo m their money? Why might they use it to build factories after the price of coffee dropped greatly?

ls present a symposium on the production fazenda. They should project photographs ir report. Or have all of the pupils growing and life on a fazenda.	Lindop, Understanding Lat. Am., pp.399-401,404-405; Gray,Exploring Am. Neighbors, pp. 229-230. For graph, see Gray, p. 231.
howing leading exports of Brazil. Ask: ank among other products?	
wing land use in the state of Sao Paulo. e important products? Why do you think rown there?	James, Lat. Am., p. 476.
ls use different reference books to s' hypotheses.	

ao Paulo is the largest industrial city
Then have pupils try to figure out what
es might have grown up in Sao Paulo. Give
t which to check.

people have gotten the money to build
How did the people around Sao Paulo make
might they use it to build factories
coffee dropped greatly?

S. Sets up hypotheses.

G. The significance of location depends upon cultural developments both within and outside of a country or region.

G. Some things can be produced better in one place than in another because of climate, resources, access, people's skills, etc.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

G. Specialization of individuals, regions, and countries makes for interdependence.

G. People tend to work hardest at those jobs or invest their money in those enterprises for which they receive the greatest incentives (monetary and non-monetary).

2. The c
kinds

D. A number
growth of

1. As the
the U.
and mo
and co
are fo
grew t

2. With t
ber of
indust

a. As
ly,
ear
Sao

on de-
pments
a

d better
er be-
s, ac-
.

up if
ch are
commun-
onal

als, re-
for in-

t at those
in those
receive
onetary and

2. The city has also developed many other kinds of industries.

D. A number of factors account for this rapid growth of Sao Paulo.

1. As the demand for coffee grew in Europe and the U.S., Brazillians began to develop more and more coffee plantations. The best soil and conditions for growing coffee in Brazil are found in the Sao Paulo region. The city grew to help serve the coffee growers.

2. With the decline of coffee profits, a number of other factors combined to produce industrial growth.

a. As the price of coffee declined drastically, the plantation owners used their earlier profits to build industries in Sao Paulo.

14. The film, Southern Brazil, would be an appropriate sourc for a close look at this time. It deals with the three southern states of the country, including Sao Paulo, an shows the diversity of activities within the region. As pupils look at the film, they should ponder whether or not diversification within region is a good thing economic ally. Why or why not?

15. Ask: Why do you think the city of Sao Paulo grew so ra idly from 1883 until today? Let pupils set up hypothes Also ask: What do you know about the demand for coffee today? (Use what they see adults doing and remind them that coffee was just beginning to be drunk widely durin the 19th century.) Why would a rising demand for coffe affect the city of Sao Paulo as well as the countryside around it?

16. Give pupils figures for the decline in the price of coffee at various points. Ask: How would this affect the city of Sao Paulo? If you had been a plantation owner and already had a good deal of money, what would you do with it so that you would continue to make more money?

Now tell pupils that many of these people began to build industries and businesses within Sao Paulo. Discuss: What if some of the people had not had a good deal of money? Would it have been so easy to build factories? Why or why not?

Brazil, would be an appropriate source
this time. It deals with the three
the country, including Sao Paulo, and
of activities within the region. As
film, they should ponder whether or
within region is a good thing economic-
ot?

Film: Southern Brazil,
USOIAA. Distributed by
DUART.

ink the city of Sao Paulo grew so rap-
l today? Let pupils set up hypotheses.
you know about the demand for coffee
hey see adults doing and remind them
t beginning to be drunk widely during
Why would a rising demand for coffee
Sao Paulo as well as the countryside

for the decline in the price of cof-
ts. Ask: How would this affect the
If you had been a plantation owner
ood deal of money, what would you do
would continue to make more money?

James, Lat. Am., ;;. 488-490.

t many of these people began to build
nesses within Sao Paulo. Discuss:
people had not had a good deal of
ve been so easy to build factories?

G. Man changes the character of the earth.

G. Soil in a particular place is affected in part by how man treats the soil.

S. Sets up hypotheses.

G. Certain physical features of sites are more desirable than others.for the development of a port city.

S. Sets up hypotheses.

S. Tests hypotheses against data.

S. Applies previously-learned concepts and generalizations to new data.

G. A place needs cheap and rapid transportation in order to carry on much trade with other places.

b. Th
di
co

c. Th
pr
cl

er of the

ce is af-
an treats

es of sites
others.for
rt city.

t data.

ned con-
ns to new

rapid trans-
arry on much
.

b. The city had a cooler climate and less disease than the cities in the low coastal plains.

c. The city's location close to Santos provides it with an excellent port close by.

17. Tell pupils that many coffee growers have moved to lands in the region which are not so good for growing the kinds of quality in high demand on the world market. As a result, coffee sales are declining as compared to sales of some other countries.

    Ask: Why would these coffee growers move off the lands which had produced such high quality coffee? Tell the class something about what has happened to the soil and about the management of the plantations.

18. Have pupils study a series of maps showing the Sao Paulo region. For example, project once more maps showing elevation, rainfall, temperature, forest zones and major coffee producing areas. Why might the city grow despite the decline in coffee prices? (Point out that those who invested in industry must have had reason to expect profits. Why?) Let pupils set up hypotheses.

19. Show picture of Santos. Ask: What kind of site does it seem to have? Why does this site give it an advantage as a harbor? What would be needed besides such a site to bring about the growth of a large city here?

    Tell pupils that a number of people work in Santos but live in Sao Paulo. Why do they think this might happen? Have pupils examine temperatures of both to see if they can get any ideas to explain this situation. One pupil might use a reference work to check on pupils' ideas.

    Also discuss: Why would the location of Sao Paulo in relation to Santos be important for other reasons?

coffee growers have moved to lands
re not so good for growing the kinds
mand on the world market. As a re-
e declining as compared to sales of

coffee growers move off the lands
ch high quality coffee? Tell the
what has happened to the soil and
of the plantations.

eries of maps showing the Sao Paulo
project once more maps showing ele-
perature, forest zones and major
s. Why might the city grow despite
prices? (Point out that those who
must have had reason to expect prof-
ls set up hypotheses.

Deasey, World's Nations,
p. 303.

s. Ask: What kind of site does it
es this site give it an advantage
uld be needed besides such a site
owth of a large city here?

Lindop, Understanding Lat.Am.,
p. 398 ; Gartler and Hall,
Understanding Brazil, p. 24.
Or May, Brazil, p. 37.

mber of people work in Santos but
hy do they think this might happen?
emperatures of both to see if they
explain this situation. One pupil
work to check on pupils' ideas.

uld the location of Sao Paulo in re-
mportant for other reasons?

S. Sets up hypotheses.

G. Factories must have some form of power to run machinery.

G. Power for industry is obtained from a number of sources, including water power or steam and electricity produced by burning coal.

G. Improved transportation facilities make possible wider and bigger markets as well as greater and less costly access to resources.

G. Every area on earth contains a combination of phenomena which share the space of places and regions. Some of these phenomena are closely interrelated, while others merely happen to be there and may have no causal dependence upon the others. Those phenomena which are tied together causally result in places and regions of distinctive character.

S. Draws inferences from a comparison of different map patterns of the same place.

S. Sets up hypotheses.

d. Th
of
el
pl
Se
th
Sa
Sa

e. Go
Sa
wi

f. Th
wh
ar
op
ra
ti

some form of
ry.

s obtained from
including water
lectricity pro-
l.

ion facilities
and bigger mar-
ter and less
ources.

contains a com-
a which share
and regions.
ena are closely
others merely
nd may have no
on the others.
h are tied to-
lt in places
nctive character.

m a comparison of
ns of the same place.

d. The city developed a plentiful supply of electricity. Sao Paulo gets its electricity from a hydroelectric plant at the base of the cliff of the Serra do Mar. The water plunges over the cliff, and then is sent back to Sao Paulo as well as to the harbor of Santos.

e. Good transportation lines connect Sao Paulo with the hinterland and with the port of Santos.

f. The city is located in a spot in which a number of other factors which are conducive to manufacturing development combine with easy access to raw materials needed for industrialization.

20. Discuss: What is needed in order to run machines in factories? How might electricity be produced in the Sao Paulo area? (Let pupils consider what they know about the area in order to set up hypotheses.)

    Read aloud a description of the way in which electricity is made in the Sao Paulo area. Project a map to show the area. Now discuss the advantages which Sao Paulo has over some other Brazillian cities because of this electricity. Compare with the lack of hydroelectric power in Buenos Aires.

21. Project a map showing railroads, highways, and airlines into Sao Paulo. How good does transportation into Sao Paulo seem to be? Why is this network important for the city?

22. Now project a series of Deasey's maps on different factors which create human potential for manufacturing in this area. Discuss the first factor which Deasey and his co-authors call "human activity stimulated by climate." Ask: What do you think the authors mean by this? Do you think that climate might be a factor? Why or why not? Also discuss the other factors. (Why was each included? Do you think it an important factor?)

    Have several pupils prepare an overlay set of maps of these factors. Then have them use a grease pencil to draw in an outline where the four factors shown in these maps are found in the same place. Let them also draw a boundary around those places where at least one of the factors is found. Now let them make a map such as that found in Deasey's map of human potential for

ed in order to run machines in fac-
ctricity be produced in the Sao
ls consider what they know about
et up hypotheses.)

Lindop, Understanding Latin America, pp. 401-402.

on of the way in which elec-
Sao Paulo area. Project a map
discuss the advantages which
e other Brazillian cities be-
ity. Compare with the lack of
Buenos Aires.

railroads, highways, and air-
How good does transportation
be? Why is this network impor-

Webb, Brazil, p. 74.

f Deasey's maps on different fac-
n potential for manufacturing
the first factor which Deasey
l "human activity stimulated by
do you think the authors mean
that climate might be a factor?
discuss the other factors. (Why
you think it an important fac-

Deasey, et. al., World's Nations, p. 308.

epare an overlay set of maps
n have them use a grease pencil
where the four factors shown in
n the same place. Let them also
those places where at least one
d. Now let them make a map such
y's map of human potential for

S. Tests hypotheses against data.

S. Sets up hypotheses.

E. An urban pop
several fact
plex social

S. Generalizes from data.

1. South Ame
populatio
growth in

a. By 197
Americ
city.

ata.

E. An urban population explosion can stem from several factors, and may result in complex social problems.

1. South America exhibits a rapid urban population growth contrasted with low growth in rural areas.

    a. By 1975 over half the people in South America will be living in a town or city.

manufacturing. They should locate Sao Paulo and Rio de Janiero on the map. Which seems to be best situated for the growth of manufacturing? Why?

23. Now project an overlay of maps such as those in Deasey showing major mining areas, major potential waterpower sites, major fiber and hide areas, and major lumbering areas. Discuss each as a factor which might make manufacturing easier, given the other human factors discussed earlier.

Deas
Nat

Let pupils use a grease pencil to draw in area where the largest number of these raw material factors are superimposed on the overlay. Have them locate Sao Paulo and Rio de Janiero. Ask: Where are they located in relationship to this area of potential? Considering all of these factors shown on all of these maps, which city do you think would become more important as an industrial center? Why?

Now have a pupil check in a textbook to find out which of the two cities is more important industrially.

24. Tell the pupils that Sao Paulo provides just one example of problems facing Latin America today--the problems arising from rapid growth of cities. Let pupils try to figure out what some of these problems might be.

25. Compare population percentages of urban-rural ratios in the United States and South America. Why is rapid urban population growth in South America considered a problem? Note that the United States is more heavily populated in urban regions than is South America and yet the United States does not have the same problems. Why?

should locate Sao Paulo and Rio de
Which seems to be best situated for
cturing? Why?

ay of maps such as those in Deasey
areas, major potential waterpower
nd hide areas, and major lumbering
as a factor which might make manu-
ven the other human factors discussed

Deasey, et. al., The World's Nations, p. 309.

ase pencil to draw in area where
f these raw material factors are
overlay. Have them locate Sao Paulo
Ask: Where are they located in
area of potential? Considering all
wn on all of these maps, which city
ecome more important as an industrial

ck in a textbook to find out which
more important industrially.

Sao Paulo provides just one example
atin America today--the problems
rowth of cities. Let pupils try to
of these problems might be.

ercentages of urban-rural ratios
and South America. Why is rapid
vth in South America considered a
the United States is more heavily
egions than is South America and yet
es not have the same problems. Why?

b. Of
cit

2. There
concer

a. Mos
50
tow

b. So-
hav

1)

2)

S. Sets up hypotheses.

S. Tests hypotheses against data.

3. Basic
in cit
Paulis
centers
nently.

a. Many
enou
turn
only
retu

b. Thos
the
cult

b. Of these, one of four will be major cities.

2. There is general agreement on the factors concerning this growth.

    a. Most migrants, who account for 40-50 percent of city growth, are small town or rural non-farm workers.

    b. So-called "push" and "pull" factors have been identified.

        1) Most come because of the "push" factors in the countryside: poverty and limited opportunity.

        2) Others come as the result of the "pull" factors in the city: better educational, health, and entertainment facilities.

3. Basic cultural differences are apparent in city life as well as in rural. Most Paulistas are newcomers from other urban centers who have come to settle permanently.

    a. Many, however, come only to work long enough to earn a sum of money and return to their homes. They may stay only a year or so at a time, and many return three or four times.

    b. Those who come from rural areas find the adjustment to city life a difficult one to make.

nst data.

26. Since this case study is concerned with the problems o
urban growth and industrialization, an introductory dis
sion should be held to bring out reasons why people wou
move to the cities. What are some reasons for this mov
ment? Assign several of Brazil's major cities to grou
as a research topic. Include Sao Paulo, and have repo
by the groups in order to compare the growth and importance of each to that of Sao Paulo. A discussion on th
peripheral location of Brazil's major cities should lea
to the concept that they are in general "tied to the se
and find outlets for their goods in other countries of
the world instead of within the "empty interior". Have
pupils read an account of the building of Brasillia, B
new capital. Review the rationale behind this move, i
the hope of developing and populating the empty interi
Ask: How has the construction of Brasilia actually add
to the already rapid growth of urban population in the
coastal regions?

27. Discuss: Why might it be difficult for people who have worked on plantations such as you have studied or who have worked in the forests to come to live in the city? Set up a series of hypothetical examples to illustrate the problems.

dy is concerned with the problems of
dustrialization, an introductory discus-
to bring out reasons why people would
What are some reasons for this move-
al of Brazil's major cities to groups
. Include Sao Paulo, and have reports
der to compare the growth and impor-
at of Sao Paulo. A discussion on the
of Brazil's major cities should lead
they are in general "tied to the sea"
r their goods in other countries of
f within the "empty interior". Have
unt of the building of Brasillia, Brazil's
w the rationale behind this move, ie.,
ing and populating the empty interior.
onstruction of Brasilia actually added
d growth of urban population in the

it be difficult for people who have
ns such as you have studied or who
forests to come to live in the city?
hypothetical examples to illustrate

Textbooks and other reference works.

For pictures and descriptions of Brasillia, see May, Brazil, pp. 42-47.
Bishop, Brazil, pp. 59-67.

A. EVALUATES CONDITIONS ON THE BASIS OF THEIR EFFECTS UPON INDIVIDUALS AS HUMAN BEINGS.

G. A man's job opportunities are limited by his training and skills.

S. Sets up hypotheses.

1) A
d

2) R
m

3) H

4. Instabi
flectio

a. Beca
port
citi

1) Y
e

2) H
a

b. At t
to i
situ

1) T
a

2) M
h
q
o

N THE BASIS
NDIVIDUALS

ies are limited
ills.

1) After working as a family, it is difficult to work for someone else.

2) Relationships with co-workers and managers are very impersonal.

3) Housing is a definite problem.

4. Instability in urban structure is a reflection of basic rural instability.

   a. Because of poverty and limited opportunity, many people come to the cities.

      1) Yet, these people are not really equipped for good jobs in the city.

      2) Hence, they remain in poor jobs on a temporary basis.

   b. At the same time, little is being done to improve the rural agricultural situation.

      1) Thus, production is low, poverty and dissatisfaction are high.

      2) Moreover, the rural people do not have the degree of wealth to qualify as a market for the goods of the cities.

28. Have a pupil investigate and report on some of the slums and housing problems in some of Brazil's large cities. Discuss: Why do such problems develop?

29. Discuss: What kinds of jobs could an average city immigrant get, given his rural background and limited formal education? A quick look at the employment section of any city newspaper can give a valid comparison in terms of requirements for industrial jobs.

30. Have pupils or a pupil again read an account of life on a large estate. Point out the percentage of land held in these large landed estates. Ask: What agricultural problems could this situation produce? How could low farm incomes affect the market for city-made goods?

G. The demand for goods is affected by the ability to pay as well as desire.

S. Considers alternative courses of action.

31. Show the film, Brazil. This film will show the contrasts in ways of living in the country. When viewing, have students consider this question--Why is it necessary for the industries of Sao Paulo to seek markets for most manufactured goods in foreign countries?	Film: Brazil, MGHT.
32. Have groups of pupils assume the roles of economic development teams: agricultural, educational, industrial, natural resources, etc., and prepare reports on how they plan to better the situation in their areas of interest.	

BIBLIOGRAPHY

I. Books and Booklets

Bishop, Elizabeth and the Editors of Life, BRAZIL (Life World Library Book) New York: Time Incorporated, 1967 ed.

Deasey, George F. and others. THE WORLD'S NATIONS. Chicago: Lippincott, 1958. (For maps for projection.)

Gartler, Marion and George L. Hall. UNDERSTANDING BRAZIL. River Forest: Laidlow, 1962.

Gray, William H., et. al. EXPLORING AMERICAN NEIGHBORS IN LATIN AMERICA AND CANADA. Chicago: Follett, 1960.

James, Preston. LATIN AMERICA. New York: Odyssey Press, 1959 ed. (For teacher.)

Lindop, Edmund, with Ernest W. Tiegs and Fay Adams. UNDERSTANDING LATIN AMERICA. Boston: Ginn, 1966 ed.

May, Stella B. BRAZIL. Grand Rapdis, Michigan: Fideler, 1966 ed.

Webb, Kempton E. BRAZIL. (Today's World in Focus Booklet.) Boston: Ginn, 1964.

Whittemore, Kathryn, et. al. THE UNITED STATES, CANADA AND LATIN AMERICA. Boston: Ginn, 1962.

II. Films

BRAZIL,
min., Co

SOUTHERN
of Inter
20 min.

BIBLIOGRAPHY

ts

h and the Editors of
fe World Library Book)
ncorporated, 1967 ed.

. and others. THE WORLD'S
: Lippincott, 1958. (For
ion.)

and George L. Hall. UNDER-
River Forest: Laidlow,

. et. al. EXPLORING A-
S IN LATIN AMERICA AND
Follett, 1960.

LATIN AMERICA. New York:
959 ed. (For teacher.)

with Ernest W. Tiegs
IDERSTANDING LATIN A-
Ginn, 1966 ed.

RAZIL. Grand Rapdis,
, 1966 ed.

BRAZIL. (Today's World
) Boston: Ginn, 1964.

yn, et. al. THE UNITED
ND LATIN AMERICA. Boston:

II. Films

BRAZIL, March of Time, Producer. 13 min., Coronet South American Series.

SOUTHERN BRAZIL, United States Office of Inter-American Affairs, Producer. 20 min.

1682
C1

Grade Five
Unit: Latin America
1 Sub Unit - Chile

RESOURCE UNIT 7/5

These materials were developed by the Project Social Studies Curriculum Center of the University of Minnesota under a special grant from the U.S. Office of Education. (Project HS-045).

1968

OBJECTIVES

This unit should make progress toward developing the foll

GENERALIZATIONS

1. Site relates a phenomena to the detailed physical setting of the area it occupies.
2. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.
3. Rainfall is affected by distances from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.
    a. Winds which cross cold water currents are cooled and will pick up moisture rather than dropping it as they cross land areas which are warmer than the water.
4. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.
    a. The significance of location depends upon cultural developments within and outside of a country or region.
    b. Climate may
    man's activi
    level of tec
    learned to c
    earlier limi
    c. Political bo
    and frequent
    natural phys
    d. A number of
    face feature
    accessibilit
    settlement p
5. Some things can
place than in an
resources, trans
to resources, ac
skills, etc.
6. A region is an a
geneous features
highly homogeneo
tional zones whe
between differen
7. The world is a c
dent countries.

OBJECTIVES

ould make progress toward developing the following:

mena to the de-
ing of the area it

ted by the dis-
or, elevation,
ater bodies,
ailing winds, and
ich block winds
ons.

by distances from
, ocean currents,
erature, and physi-
lock winds carry-

s cold water cur-
and will pick up
than dropping it
nd areas which are
water.

l environment in
l values, percep-
technology.

of location de-
ral developments
de of a country

b. Climate may set up limitations on man's activities given a specific level of technology, but man has learned to overcome many of the earlier limitations.

c. Political boundaries are man-made and frequently do not follow any natural physical boundaries.

d. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement patterns.

5. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, etc.

6. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

7. The world is a community of interdependent countries.

8. Specialization of countries makes for interdependence.

9. Diversification of production makes a company of a region less dependent upon price fluctuations for one product or upon the supply of specific resources.

10. Machinery and power make possible greater production per person and lower cost per unit.

11. The organizational structure of the total economy or of any large section of it (such as agriculture) affects efficiency of production and output.

12. The power to allocate resources is important to the power to control what and how much will be produced.

SKILLS

1. Sets up hypotheses.

2. Uses atlas index to locate places.

3. Compares distances.

4. Compares areas.

5. Interprets map symbols.

6. Draws
differe
area.

7. Develop
particu

8. Gains

    a. Dra

9. Interpr

10. Gains i

11. Applies
general

12. Tests h

13. General

tries makes for

duction makes
less dependent
s for one pro-
y of specific

ke possible
person and

ture of the
y large section
ture) affects
on and output.

resources is im-
o control what
roduced.

cate places.

6. Draws inferences from a comparison of different map patterns of the same area.
7. Develops a system of regions to fit a particular purpose.
8. Gains information by studying pictures.
    a. Draws inferences from pictures.
9. Interprets pie (circle) graphs.
10. Gains information by studying films.
11. Applies previously-learned concepts and generalizations to new data.
12. Tests hypotheses against data.
13. Generalizes from data.

OBJECTIVES

S. Interprets map symbols.

S. Compares distances.

S. Compares areas.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

S. Develops a system of regions to fit a particular purpose.

S. Draws inferences from a comparison of different map patterns of the same area.

S. Sets up hypotheses.

S. Tests hypotheses against data.

OUTLINE OF CONT

I. Chile is a l
coast of Sou

A. It is div
coastal h
valleys i

B. Chile has
does the
area.

C. Chile is
gions.

OUTLINE OF CONTENT

I. Chile is a long, narrow country on the western coast of South America.

   A. It is divided into high mountains on the east, coastal highlands and mountains on the west, and valleys inbetween.

   B. Chile has a larger north-south distance than does the U.S., although it covers a much smaller area.

   C. Chile is usually divided into three major regions.

one or more
The core area
but there are
e boundaries
rent regions.

gions to fit

comparison
s of the same

t data.

TEACHING PROCEDURES

1. Have pupils examine a physicial-relief map of Chile. What do they notice about the physical relief? How does it change from north to the south?

2. Have a pupil use a string to measure the north-south distance on a globe and then to measure off a similar distance in North America. Or have pupils count the number of degrees of latitude in Chile and compare it with the number in the U.S. or North America.

3. Have pupils guess at the area of Chile as compared with some of the states in the U.S. Then have a pupil look up areas and make a bar graph to compare them.

4. Tell pupils that most geographers speak of three major regions in Chile. How would pupils regionalize or divide up the country on the basis of physical relief alone?

   Now show pupils a map of the three main regions usually designated by geographers. Ask: Why do you think the regions are not based upon physical relief?

   Show photos illustrating the three different regions without telling pupils the location for them. Now ask: What differences do you see between these three regions? Where do you think they might be found on the map?

   Have pupils examine a physical map, a map of currents, and a map of prevailing winds. They should try to set

MA

Ph
or
ch
Th

Gl

Wor

Phy
or
see
8-
Lat
306
U.S
pp.
oce
wir
and
Jan
see
fal
a m
and
Wor
map

ysicial-relief map of Chile. What
e physical relief? How does it
south?

g to measure the north-south dis-
n to measure off a similar dis-
Or have pupils count the number
n Chile and compare it with the
rth America.

area of Chile as compared with
e U.S. Then have a pupil look
graph to compare them.

ographers speak of three major
ould pupils regionalize or di-
e basis of physical relief a-

the three main regions usually
. Ask: Why do you think the
n physical relief?

the three different regions
e location for them. Now ask:
ee between these three regions?
ight be found on the map?

sical map, a map of currents,
inds. They should try to set

MATERIALS

Physical-relief map of Chile or South America. (e.g. Borchert and McGuigan, Geog. of The New World, pp. 402-403.)

Globe and string.

World Almanac.

Physical relief map of Chile or South America. For pictures see, Chile in Pictures, pp. 6, 8-11, 13; Lindop, Understanding Lat. Am., pp. 290, 292-293, 299, 306-310; Whittemore, et.al., U.S., Canada, Lat. Am., Pt. II, pp. 50, 54, 58, 59. For maps of ocean currents and prevailing winds, see Goode's World Atlas, and James, Lat. Am., p. 43. For Jan. and July temperature maps, see James, pp. 30-31. For rainfall map, see James, p. 40. For a moisture map, see Borchert and McGuigan, Geog. of the New World, p. 409. For vegetation map, see James, p. 239.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

S. Sets up hypotheses.

S. Tests hypotheses against data.

S. Tests hypotheses against data.

G. Site relates a phenomena to the detailed physical setting of the area it occupies.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

G. Rainfall is affected by distances from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.

1. The central re
valleys which
units by the p

   a. About one t
   this region
   the east, a
   highlands w
   sea at most
   Central Val
   many valley

   b. The central
   and mild we
   iation in b
   tion as one
   northern en
   southern en

ected by the dis-
ator, elevation,
water bodies,
evailing winds,
res which block
directions.

ainst data.

ainst data.

omena to the de-
ting of the area

cted by the dis-
tor, elevation,
ater bodies,
vailing winds,
es which block
directions.

d by distances
water, ocean
ction, tempera-
features which
g moisture.

1. The central region is a region of fertile valleys which are divided into many small units by the physical relief.
   a. About one third to a half of the width of this region is taken up by the Andes to the east, another third by the western highlands which dip down sharply into the sea at most places, and the rest by the Central Valley which is really made up of many valleys separated by high spurs.
   b. The central region has cool, dry summers and mild wet winters. There is some variation in both temperature and precipitation as one moves from the drier and warmer northern end to the wetter and cooler southern end of Middle Chile.

up hypotheses about where the places shown in the pictures were taken and so about the temperature, rainfall and vegetation of each region. Let them check against maps showing these rainfall, temperature, and vegetation patterns. Don't tell the class where photos were taken until after activity no. 5.

5. Put large maps of different patterns on the bulletin board or project them again. Ask each pupil to write a brief description of what he thinks the central region, northern region, and southern regions would be like. What would be the characteristics of each?

6. Prepare a picture display grouped according to the major regions of Chile to illustrate the great diversity of physical and cultural characteristics within this country.

7. Now discuss pupils' hypotheses about the central region. Read aloud a description so that they can check their ideas against those of geographers. Use photos to help pupils visualize the region. Ask: How can you explain the temperature and rainfall pattern in this region?

e the places shown in the pic-
about the temperature, rainfall
egion. Let them check against
all, temperature, and vegetation
e class where photos were taken
5.

ent patterns on the bulletin ain. Ask each pupil to write hat he thinks the central re- nd southern regions would be characteristics of each?	See above.
grouped according to the major trate the great diversity of phy- teristics within this country.	
heses about the central region. so that they can check their ographers. Use photos to help on. Ask: How can you explain all pattern in this region?	Lindop, Understanding Lat. Am., pp. 291-92, 296; Gray, Exploring Am. Neighbors, pp. 177-178.

S. Draws inferences from pictures.

G. Rainfall is affected by distances from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

G. Rainfall is affected by distances from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.

G. Winds which cross cold water currents are cooled and will pick up moisture rather than dropping it as they cross land areas which are warmer than the water.

S. Sets up hypotheses.

2. The no
Atacam

a. i
e..s
eve
sin
gen
coa
abl
lon

b. In
cor
a r
sou
dow
tan
wat
but
alo

c. The
ert

d. Thi

from pictures.

ted by distances
rm water, ocean
rection, tempera-
l features which
ing moisture.

fected by the dis-
uator, elevation,
m water bodies,
revailing winds,
ures which block
n directions.

ted by distances
rm water, ocean
rection, temper-
al features which
ing moisture.

cold water cur-
and will pick up
han dropping it
d areas which are
ater.

s.

2. The northern region is dominated by the Atacama desert.

   a. This region, too, has high mountains to the east and highlands along the coast. However, the central area consists of dry basins within a plateau region which slopes gently from the Andes to the Western coastal region. These basins were probably lakes at one time but they dried up long ago.

   b. In some places no rain has ever been recorded; however, some oases are found along a river which crosses the desert to the south and along some water sources coming down and entering the desert a short distance from the mountains to the east. The water tends to seep down below the surface but can be obtained by wells. Several places along the coast can use wells too.

   c. The coastal and central parts of the desert have no vegetation at all.

   d. This region has rich mineral resources.

8. Project a photo of some of the farm land in the Central Valley region. What do pupils notice about the color of the soil? Does this tell them anything about its fertility? Why or why not? (Review what pupils have learned earlier as they studied the U.S.)

9. Have pupils locate the Atacame desert on the map. Discuss their hypotheses about what this region would be like.

10. Read aloud descriptions of the Atacama Desert. Ask: Why would this region be so dry when it is close to the Pacific? Have a pupil read to find out. He should report to the class, using a map to illustrate his findings.

    Project several photographs showing the Atacama Desert. For example show a picture of the desert with the Loa running through it. Read aloud a description of the town of Copiapo and how it gets its water.

11. At this point do not discuss thoroughly or have pupils study the minerals of the desert region. Rather ask: Why do you think anybody would want to live here? Let pupils set up hypotheses to check later.

e of the farm land in the Central o pupils notice about the color of ell them anything about its fer- t? (Review what pupils have y studied the U.S.)	Lindop, Understanding Latin America, p. 292.
Atacame desert on the map. Dis- about what this region would be	Wall map of South America or Chile. Or see Whittemore, et.al., U.S., Canada, Lat. Am., Pt. II, p. 52; Lindop, Understanding Lat. Am., p. 291.
of the Atacama Desert. Ask: Why dry when it is close to the Pa- ad to find out. He should report ap to illustrate his findings.	Lindop, Understanding Lat. Am., p. 293.
aphs showing the Atacama Desert. ure of the desert with the Loa ad aloud a description of the it gets its water.	Lindop, p. 293; Pendle, Land and People of Chile, ff. p. 329 (photo), pp. 46-47; James, Lat. Am., p. 255.
scuss thoroughly or have pupils he desert region. Rather ask: Why uld want to live here? Let pupils eck later.	

S. Draws inferences from pictures.

S. Tests hypotheses against data.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

G. Rainfall is affected by distances from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.

S. Gains information by studying pictures.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

3. Southern Ch

a. The regi
heavy fo
grass ar

b. The same
the cent
south in
Andes do
the sout
one moun

c. The clim
west coa
wet summ

pictures.

nst data.

ed by the dis-
r, elevation,
ter bodies,
iling winds,
which block
rections.

by distances
ater, ocean
ion, temper-
eatures which
moisture.

studying pic-

one or more
The core area
but there are
ere boundaries
ferent regions.

3. Southern Chile is a forested highland area.
   - a. The region was originally covered by heavy forests, although there are some grass areas in the drier parts.
   - b. The same general physical features of the central part of Chile are continued south into this region; although the Andes do not rise so high, and toward the southern end the land becomes almost one mountainous area.
   - c. The climate is much like that of the northwest coast of the United States, with cool, wet summers and cool, wet winters.

12. Project pictures showing the lake district and some of the forests of Southern Chile. What physical features do they notice?

    Discuss the pupil's descriptions of what they thought Southern Chile would be like.

Li
Am

13. Have pupils compare temperatures and the rainfall pattern for Chile and the west coast of the United States. Let them place the southern tip of Chile at the top of the bulletin board parallel with the Pacific coast region in this country. (Since Chile is longer from north to south, place it in the appropriate place in terms of distance from the equator.) Ask: What do pupils notice about the climate of the areas which are an equal distance from the equator?

14. The film on Chile would be an appropriate summary activity because it presents a brief description of all the "faces" of the country.

Fi

wing the lake district and some of
ern Chile. What physical features

Lindop, Understanding Lat. Am., pp. 290, 307.

descriptions of what they thought
be like.

temperatures and the rainfall pattern
t coast of the United States. Let
ern tip of Chile at the top of the
lel with the Pacific coast region in
Chile is longer from north to south,
opriate place in terms of distance
Ask: What do pupils notice about the
which are an equal distance from the

would be an ap-
ivity because it presents a brief
e "faces" of the country.

Film: Chile, E.B.F., 15 min.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Man uses his physical environment in terms of his cultural values, perceptions and level of technology.

S. Sets up hypotheses.

S. Tests hypotheses against data.

II. We look at
and settlem
pied the re
eral groups
ern group a
the land.

A. The Arau
had a se
tion. T
the Incas
of Inca

1. Those
close
chief
They
desert

2. Those
valley
they

B. The Arau
forests a
were fier
quest for

III. We look at

A. As might
of popula
dominated
estates.

1. The Sp
even t

al environment
tural values,
vel of technol-

II. We look at Chile prior to the Spanish explorations and settlements when the Araucanian Indians occupied the region. They were separated into two general groups both by the Inca conquest of the northern group and by the way in which they lived off the land.

A. The Araucanians of central and northern Chile had a settled agriculture, supported by irrigation. They had been brought under control by the Incas but were far enough from the center of Inca culture to remain fairly independent.

1. Those in the northern third of Chile remained close to water sources in oases and along the chief river. They were agriculturalists. They did not use the mineral resources of the desert region.

2. Those in central Chile spread out through the valley and developed irrigation ditches where they were needed.

B. The Araucanians of southern Chile lived in the forests and were hunters and fishers. They were fierce warriors who held off Spanish conquest for over two hundred years.

al environment
tural values,
el of technol-

III. We look at Chile in 1870.

A. As might be imagined, the heaviest settlement of population was in Central Chile, which was dominated by agriculture carried on in large estates.

ainst data.

1. The Spanish had settled in this region first, even though they found no minerals here. They

15. Assign a group to report on the Araucanian Indian culture in Chile. They should compare the culture of this group and others studied earlier in the course. Pupils should also note differences between those who lived in Southern forests and those who lived to the North.

Fan.
ians
Jame
265.

16. Tell pupils that they are now going to look at Chile in 1870. Review with them what they learned about the coming of the Spanish. Ask: Why might the Spanish wish to go to Chile once they decided it did not have much by way of minerals? Where would you expect most of the Spanish to settle? Why? Tell pupils when Chile got its independence. Ask: What would you expect, the population pattern to look like by 1870?

For
Lat.

rt on the Araucanian Indian cul-
hould compare the culture of this
ed earlier in the course. Pupils
rences between those who lived in
hose who lived to the North.

Pan. Am. Union, The Araucanians. For teachers use, see James, Lat. Am., pp. 237, 240, 265.

are now going to look at Chile in
n what they learned about the com-
sk: Why might the Spanish wish
ey decided it did not have much by
e would you expect most of the
y? Tell pupils when Chile got its
hat would you expect, the popula-
ike by 1870?

For teacher use, see James, Lat. Am., pp. 240-41.

G. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement patterns.

G. Climate may set up limitations on man's activities given a specific level of technology, but man has learned to overcome many of the earlier limitations.

divided up lan
haciendas, whi

a. They grew f
upon land i
of the Ande

b. The landown
in herding.
high mounta
and were dr
ing the win
there.

c. Only about
central val
chief crop
came to rel
from wheat t

d. Some vineya
almost ever
the major c

2. The Spanish se
dians, so that
central region
Indian blood (
strains somewh
social divisio
workers rather
large landowne

B. The northern area
ulated, but it wa
trates and copper

1. Some Indian se

divided up land into huge estates known as haciendas, which were worked by the Indians.

a. They grew feed crops in the central valley upon land irrigated from the melting snow of the Andes.

b. The landowners were interested primarily in herding. The cattle grazed in the high mountain pastures during the summer and were driven down into the valleys during the winter and fed on the crops grown there.

c. Only about one tenth of the land in the central valley was used to grow food; the chief crop was wheat. Even the Indians came to rely more heavily upon bread made from wheat than from maize.

d. Some vineyards were also established on almost every hacienda; they were also the major crops in several sections.

2. The Spanish settlers had mixed with the Indians, so that most of the people in this central region were of mixed Spanish and Indian blood (mestizos), with the Spanish strains somewhat the stronger. However, the social division was between landowners and workers rather than between races. Even the large landowners had much mixed ancenstry.

B. The northern area of Chile was not heavily populated, but it was being mined heavily for nitrates and copper.

1. Some Indian settlements remained close to

Have pupils read a brief description of central Chile in 1870. Afterwards discuss: Did your reading support or contradict your guesses about the population distribution? How did land use in the Central Valley compare with that in the Buenos Aires area which you have studied? What effect do you think this mixing of white and Indian people would have upon the way in which the people lived?

17. Tell pupils that some Indian groups continued to live in the desert in much the same way as they had in the past, close to water sources. Ask: Would you expect many white men to have come into this desert region. Why or why not?

See Lindop, Understanding La Am., p. 294.

G. Political boundaries are man-made and frequently do not follow any natural physical boundaries.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

sources of wate

2. During this peri
region was owned
ean companies op
Finally, Chile w
Peru which joine
long northern se

3. The first resour
nitrates.

   a. Nitrates were
   as fertilizer
   no competing
   Some 50,000 t
   of the countr
   1850's.

   b. Then it was d
   could be used
   demand for Ch
   after 1860.

   c. It was very d
   workers neede
   Food supplies
   water had to
   tank cars.

ies are man-made
not follow any
boundaries.

cal environment
ltural values,
evel of technol-

sources of water.

2. During this period, much of this northern region was owned by Bolivia, although Chilean companies operated the nitrate mines. Finally, Chile went to war with Bolivia and Peru which joined Bolivia. Chile won the long northern section of the desert region.

3. The first resource to be exploited was nitrates.

   a. Nitrates were found to be useful first as fertilizers. At this time there was no competing source of such nitrates. Some 50,000 tons ofit were shipped out of the country each year during the late 1850's.

   b. Then it was discovered that the nitrates could be used in high explosives and the demand for Chilean nitrates increased after 1860.

   c. It was very difficult to care for the workers needed in the nitrate industry. Food supplies had to be brought in. Even water had to be piped in or brought by tank cars.

Tell pupils that three countries once even fought over this desert. Have pupils set up hypotheses as to possible reasons. They should check later as they continue this section of the unit.

18. Have a pupil read and give a report on the causes of the war and its results. Pupils should examine a map to note the old and new boundaries of Chile.

Gra
p.
Und

19. Have several pupils role-play a discussion between two western mine owners who are discussing the demand for nitrates for different purposes, mining techniques, land transportation which they are using, and the problems of feeding and providing water for the workers. Let them do some speculating about the prospects for profits in the future, given the fact that this area was the only known area in the world which produced such nitrates.

Pen
of

ree countries once even fought over
pupils set up hypotheses as to possi-
should check later as they continue
unit.

nd give a report on the causes of the
. Pupils should examine a map to note
ndaries of Chile.

Gray, Exploring Am. Neighbors, p. 175; for map, see Lindop, Understanding Lat. Am., p. 294.

role-play a discussion between two
who are discussing the demand for ni-
purposes, mining techniques, land
they are using, and the problems
ding water for the workers. Let them
about the prospects for profits in
e fact that this area was the only
rld which produced such nitrates.

Pendle, The Land and People of Chile, pp. 51-52.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

4. Silver was s
It was found
miners from
in the oasis

5. Copper minin
importance i

D. There was just
settlement in S

1. The Araucani
life and had
from the Nor
However, the
riculture ra
ricultural c

2. Some warfare
settlements
coast.

4. Silver was shipped out from several ports. It was found difficult to feed all of the miners from the food which could be grown in the oasis areas.

5. Copper mining had just begun to be of importance in the desert in 1850.

D. There was just beginning to be some European settlement in Southern Chile.

   1. The Araucanians had modified their way of life and had adopted some Spanish customs from the North and become more sedentary. However, they had adopted shifting agriculture rather than more perman nt agricultural communities.

   2. Some warfare still took place with white settlements which had begun along the coast.

20. Tell pupils that silver was discovered on the desert before 1832. Read aloud James' description of the effects of this discovery on the Copiapo area and production of silver in this part of the 19th century as compared to production of copper. Discuss: Why would it have been more difficult at that time to provide food and water for all of the people who wanted to live on the desert than it would be today?

Se
p.

21. Use a map to show pupils the location of some of the copper deposits. Ask: What ports would be the likely choices to which to transport the copper for shipping abroad? Would such cities be likely to set up their own smelting plants to process the copper? Why or why not?

Tell pupils the period in which copper began to be important. Perhaps give them figures for production in this period so that pupils can compare the importance of copper production with that of silver and nitrate production.

Li
Am
Se
p.

22. Have pupils read a brief description of Southern Chile in 1870. Discuss: How would you compare this region with the others in terms of the amount of change which had taken place since the Spanish arrived in Chile? Can you think of any possible explanations?

Li
Am

ver was discovered on the desert be- ud James' description of the effects the Copiap area and production of f the 19th century as compared to . Discuss: Why would it have been at time to provide food and water who wanted to live on the desert ay?	See James, *Latin America*, p. 258.
ils the location of some of the cop- What ports would be the likely transport the copper for shipping cities be likely to set up their own rocess the copper? Why or why not?	Lindop, *Understanding Latin America*, p. 294. See also James, *Latin America*, p. 258.
d in which copper began to be im- e them figures for production in this can compare the importance of cop- hat of silver and nitrate produc-	
rief description of Southern Chile How would you compare this region rms of the amount of change which the Spanish arrived in Chile? Can ible explanations?	Lindop, *Understanding Latin America*, pp. 306-307.

3. Beginning in 18
   to move into th

   a. German immig
      coastal area
      coming by 18
      built roads,
      tural commun

   b. Settlers of
      region remai

S. Generalizes from data.

IV. We look at Chile toda

A. About 65 per cent
   Indian and Spanish
   heredity a little
   mainder of the pop
   per cent of those
   5 per cent of thos

S. Generalizes from data,

B. The most intensive
   is still the "Cent

1. Today the land
   large estates u
   yards.

S. Sets up hypotheses.

S. Tests hypotheses against data.

2. This central re
   of the major ci

   a. It is to the
      people are r

   b. The result
      Sao Paulo: c
      nomic opport

3. Beginning in 1850 some Europeans began to move into the Southern region.

a. German immigrants began to come to coastal areas, but they had stopped coming by 1860. They cleared forests, built roads, and established agricultural communities.

b. Settlers of Spanish descent in this region remained very few.

IV. We look at Chile today.

A. About 65 per cent of the people are of mixed Indian and Spanish blood, with the Spanish heredity a little more pronounced. The remainder of the population is made up of 30 per cent of those of pure Spanish descent and 5 per cent of those of pure Indian descent.

B. The most intensively-developed part of Chile is still the "Central Valley" of middle Chile.

1. Today the land is still held mainly in large estates used for grazing and vineyards.

2. This central region is also the site of most of the major cities.

data.

a. It is to these cities that most of the people are rushing.

b. The result is much the same as it is in Sao Paulo: overcrowding and tenuous economic opportunities.

23. Put figures on the board for the present racial composition of the population of Chile. Ask: How does the population of Chile compare with that of Argentina? Peru? the Brazil basin area? Sau Paulo?

See

24. Have a pupil read and report on life in a hacienda in the Central Valley. Afterwards ask: How does life on a hacienda compare with life on one of the large estates in Argentina?

See
Lati
Or s
U.S.
pp.

25. Project a photo of Valpariso. What can pupils tell about the advantages of this city as a port? From what they have studied about Seattle, where would they expect to find the business district and manufacturing area? the homes?

Lind
Amer
and
For
Sant
303.

Now have a pupil check against a description. Ask: Why do you think this city has grown so large?

Have a pupil investigate the city of Santiago and tell the class about it.

for the present racial composi- f Chile. Ask: How does the are with that of Argentina? area? Sau Paulo?	See James, Latin America.
port on life in a hacienda in erwards ask: How does life on life on one of the large estates	See Lindop, Understanding Latin America, pp. 299-301 Or see Whittemore, et. al., U.S., Canada, Latin America, pp. 55-57 (of part on L. Am.).
riso. What can pupils tell this city as a port? From what Seattle, where would they ex- s district and manufacturing	Lindop, Understanding Latin America, p. 298. (Picture and description.) For a brief description of Santiago, see Lindop, pp. 301-303.
gainst a description. Ask: ty has grown so large?	
the city of Santiago and tell the	

c. Again, the bas
efficiency in
and much neede

G. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, etc.

3. This region conta
dustrial centers
greatest variety

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

C. The main activities
still mining activit
still live much as i
sources.

G. The significance of location depends upon cultural developments within and outside of a country or region.

1. The nitrate indust
1870.

a. The decline cam
of reclaiming n
perfected.

b. Natural nitrate
some purposes.

c. Approximately t
iodine is made
this desert fro

produced better
in another because
ces, transporta-
s to resources,
people's skills,

.

gainst data.

cal environment
ltural values,
evels of tech-

f location de-
l developments
of a country

c. Again, the basic problem appears as inefficiency in agricultural techniques and much needed land reform.

3. This region contains nearly all of the industrial centers of Chile as well as the greatest variety of needed commodities.

C. The main activities in the Atacoma desert are still mining activities, although some Indians still live much as in the past, near water resources.

1. The nitrate industry is much smaller than in 1870.

   a. The decline came in 1928 when the process of reclaiming nitrogen from the air was perfected.

   b. Natural nitrates are still superior for some purposes.

   c. Approximately three-fourths of the world's iodine is made from the same material in this desert from which nitrates are made.

26. Have a report on the iron and steel plant at Concepcion, one of the few such enterprises in all of South America. What basic raw materials are needed for this industry? What prime and absolutely essential mineral do most South American countries generally lack despite the continent's wealth in hundreds of other valuable resources? Why is this mineral so important to economic and industrial development.

Lindop,
pp. 31

27. Give pupils figures on the decline of nitrate production. Then ask: Why do you think nitrate mining should have declined so much in importance? Let pupils make guesses. They may decide that resources have been exhausted, etc. Have them read to find out the answer.

See Jam
261. (A

28. Ask: Why do you think any nitrates are mined any more? Explain their advantage over the synthetic nitrates in the sugar beet industry. Also explain the use of the material for making iodine.

Pendle,
Chile,

ron and steel plant at Concepcion, terprises in all of South America. s are needed for this industry? ly essential mineral do most South rally lack despite the continent's ther valuable resources? Why is nt to economic and industrial de-	Lindop, Understanding Lat. Am., pp. 311-312.
the decline of nitrate production. hink nitrate mining should have ortance? Let pupils make guesses. sources have been exhausted, etc. out the answer.	See James, Lat. Am., pp. 260-261. (Adapt for pupils.)
any nitrates are mined any more? over the synthetic nitrates in . Also explain the use of the ma- e.	Pendle, Land and People of Chile, p. 58.

S. Generalizes from data.

S. Applies previously-learned concepts and generalizations to new data.

G. Machinery and power make possible greater production per person and lower cost per unit.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

G. Climate sets up limitations upon man's activities, given a specific level of technology, but man has learned to overcome many of the earlier limitations.

S. Draws inferences from pictures.

S. Uses atlas index to locate places.

S. Generalizes from data.

G. Climate sets up limitations upon man's activities, given a specific level of technology, but man has learned to overcome many of the earlier limitations.

2. At present th
copper, iron,

ed concepts
ew data.

possible
erson and

vironment
values,
of tech-

ns upon
specific
man has
of the

ctures.

te places.

2. At present the Atacama is being worked for copper, iron, and coal.

ons upon
a specific
man has
of the

29. Now project pictures showing the mining of nitrates today. Ask: What changes have taken place? Read aloud a description of modern mining methods. What would these techniques do to the cost of mining?

30. Tell the class that most of the big nitrate companies are now owned by the U.S. Ask: How would they get people to go to live in this region? Where could they get water?

    Describe to the class what the companies have done.

31. Project a photo of the port of Antoffgasta on the Atacama desert. Ask: What does this photo show about the land? Have pupils locate the port on the map, using the atlas index. Where do pupils think they might get water for the town?

32. Have several pupils look up and report on mineral products of each of Chile's major regions. Ask: Which region has the greater share? Which brings in the most money from exports to other countries?

he mining of nitrates to- taken place? Read aloud methods. What would these ining?	Pendle, *Land and People of Chile*, pp. 49, 52. For description, see p. 52. *Chile in Pictures*, pp. 55-57.
e big nitrate companies are ow would they get people to ere could they get water? companies have done.	Pendle, *Land and People of Chile*, p. 58.
Antoffgasta on the Atacama photo show about the land? the map, using the atlas they might get water for	Pendle, *Land and People of Chile*, ff. 48. *Chile in Pictures*, p. 35.
d report on mineral prod- regions. Ask: Which re- hich brings in the most untries?	Textbooks.

G. Man uses his physical environment in terms of his cultural values, perceptions, and levels of technology.

S. Interprets pie (circle) graphs.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. A number of factors -- climate, surface features, natural resources, accesibility, and history -- affect settlement and growth patterns.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

a. By far
Chile
of the

b. Only 5

3. The perma
tied clos
have chan
to Chile.

D. Southern Chi
of the count

1. The popul
one milli
except fo
southern

a. Populat

b. A large
born th

c. The big
the arm
firm co

nvironment
l values,
of technol-

graphs.

nvironment
l values,
of technol-

climate,
al re-
nd history
d growth

nvironment
l values,
of technol-

a. By far the most important mineral to Chile is copper; copper makes up 60% of the country's export value.

b. Only 5% of Chile's workers are in mining.

3. The permanent Indian settlements are still tied closely to the sources of water. They have changed little since the Spanish came to Chile.

D. Southern Chile may be called the pioneer area of the country.

1. The population of the region today is over one million. Most of the region is occupied, except for some of the still heavily forested southern areas.

   a. Population densities are low.

   b. A large proportion of the people were not born there.

   c. The big settlement push began in 1883 when the army was sent into the area to get firm control over the Indians.

33. Have a group report on Chile's copper industry, one o
the most important sources of income for the country.
This could be combined with a display based on the ma
uses of this important metal. Project photos of a co
per mine in the desert.

34. Show the class a pie graph which you have made of the
percentage of Chile's workers who are engaged in mini

35. Have a "dialogue" between two groups of students. On
group should take the role of European or American min
ing experts. The other group should portray Indians
live permanently in the Atacama region. Ask them to
discuss their outlook on life in the Atacama region.

36. Project a population density map. How does the South
ern region compare with the other two in terms of pop
ulation? Give pupils figures on both total pupulatio
in region and the proportion of Chile's population fo
in this region (about one-seventh). Point out that a
large number of these people were not born in the reg
Review reasons why people hesitated to settle there e
lier. Now tell them about the use of the army to que
Indians.

Chile's copper industry, one of
ces of income for the country.
with a display based on the many
metal. Project photos of a cop-

Pan Am. Union, Copper, pp. 3-10; Pendle, Land and People of Chile, ff. p. 32; for teacher use: Highsmith, Case Studies in World Geography, pp. 132-138.

aph which you have made of the
orkers who are engaged in mining.

en two groups of students. One
le of European or American min-
group should portray Indians who
e Atacama region. Ask them to
n life in the Atacama region.

nsity map. How does the South-
the other two in terms of pop-
igures on both total pupulation
rtion of Chile's population found
ne-seventh). Point out that a
eople were not born in the region.
le hesitated to settle there ear-
out the use of the army to quell

James, Lat. Am., p. 273 (maps). Deasy, et.al., World's Nations, p. 258.

S. Draws inferences from pictures.

G. Some things can be produced better in one place than in another because of climate, topography, resources, transportation routes, access to resources, access to markets, people's skills, landforms, etc.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Some things can be produced better in one place than in another because of climate, resources, transportation routes, access to resources, access to markets, people's skills, landforms, etc.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

2. Agr
tha

a.

2

3

b. A

c. T
p

2. Agriculture is more important in this region than is lumbering.

   a. The emphasis is upon grazing, with only about 20 per cent of the land being used to raise food crops.

      1) The area is important for grazing.

      2) The region produces an important share of the country's wheat.

      3) Other crops include potatoes, oats, apples, and hay.

   b. Although there is a large forest reserve, lumbering is not an important business.

   c. The Southern Region is still an area of potential growth.

37. Have a pupil present a report comparing life in the cities of central Chile and life in the southern forest region. Discuss the south as a "pioneer" area.

38. Project a picture showing sheep grazing in the southern region. Ask: What does the picture show about the physical relief in this region? Why would this be a good grazing region?

    Have a pupil investigate and report on the sheep-raising industry in Southern Chile.

39. Ask: What did you learn earlier about the natural vegetation in this region? What would you expect to be one of the chief ways of making a living? Now point out that lumbering is not an important industry. Have pupils try to figure out why this might be so. Then read aloud statements summarizing the reasons why there is so little lumbering as compared to herding. Discuss the pupils' hypotheses in the light of this data.

40. Discuss: How do you think the region of Southern Chile could be developed economically? (e.g. What might happen to lead people to engage in lumbering? How else might such an area increase its economic growth?) Perhaps look at photographs once more to consider the possibilities of increasing the tourist industry? Ask: What is needed besides scenery such as this to build a tourist trade? Point out that oil use decreased during the 1940's in north-

rt comparing life in the
life in the southern forest
as a "pioneer" area.

Gray, Exploring Am. Neighbors,
pp. 178-79, 183.

heep grazing in the southern
e picture show about the phy-
? Why would this be a good

Lindop, Understanding Lat. Am.,
p. 308 (picture) 309 (account).

d report on the sheep-raising

arlier about the natural vege-
at would you expect to be one
g a living? Now point out that
ant industry. Have pupils try
ht be so. Then read aloud
reasons why there is so little
erding. Discuss the pupils'
this data.

Lindop, Understanding Lat. Am.,
pp. 308-9; James, Lat. Am.,
p. 269.

the region of Southern Chile
cally? (e.g. What might happen
n lumbering? How else might
conomic growth?) Perhaps look
consider the possibilities of
ustry? Ask: What is needed
s to build a tourist trade?
ased during the 1940's in north-

G. The world is a community of interdependent countries.

G. Specialization of countries makes for interdependence.

G. Diversification of production makes a company or a region less dependent upon price fluctuations for one product or upon the supply of specific resources.

S. Gains information by studying films.

G. The power to allocate resources is important to the power to control what and how much will be produced.

G. The organizational structure of the total economy or of any large section of it (such as agriculture) affects efficiency of production and output.

F. With
not h

1. Al
Ch

a.

b.

c.

2. Be
ag

a.

b.

munity of inter-
s.

countries makes
e.

production makes
ion less dependent
tions for one prod-
pply of specific

by studying films.

ate resources is
ower to control
will be produced.

structure of
or of any large
h as agriculture)
of production

F. With a variety of resources, a country may still not have a good economic balance.

1. Although a predominant supplier of minerals, Chile's economy has not been stable.

   a. There is a general instability of the population dependent on mining.

   b. Foreign trade dominance by copper and nitrates leaves Chile almost powerless to control internal commercial efforts -- the nitrate business is owned in London; the copper business mostly in New York.

   c. Since most of the government revenues have come from export taxes on copper and nitrates, the whole structure of the economy rests on an unstable level.

2. Because of an outmoded land-holding system, agriculture is inefficient.

   a. Despite its considerable area of arable land, Chile is a net importer of food.

   b. One indication of Chile's agricultural situation is apparent when we see that although the country produces fertilizer for export, very little is used domestically.

ern Tierra del Fuego. How might such a deficiency affect the area?

41. Tell pupils that Chile has had some bad times for workers and employers. (Define what you mean by such a statement, or ask pupils to try to define.) Ask: Can you think of any reasons for this? What problems must have arisen whe nitrate production was reduced greatly? What would happe if Chile couldn't sell as much copper as before? (Examin a table on Chile's exports, and discuss the probable effe if copper exports were cut in half.) What would happen i the price of copper went down greatly? (Give pupils figu on the loss to Chile when the price of copper drops one c

42. Show the film, Chile's Copper -- Mining and Refining in the Atacama, to emphasize the importance of this metal to Chil economy. Point out also that most of the ownership lies o side the country. Ask: How can this be a problem in plan ning economic development?

43. Show the film Chilean Hacienda, which characterizes one of Chile's major problems -- food supply. Most of the best land in Chile, as in other South American countries, is held in large landed estates. Not enough of the necessary food crops are grown.

How might such a deficiency af--

e has had some bad times for workers
ne what you mean by such a statement,
to define.) Ask: Can you think of
? What problems must have arisen when
s reduced greatly? What would happen
l as much copper as before? (Examine
ports, and discuss the probable effects
e cut in half.) What would happen if
ent down greatly? (Give pupils figures
when the price of copper drops one cent.)

Copper -- Mining and Refining in the
the importance of this metal to Chile's
lso that most of the ownership lies out-
k: How can this be a problem in plan-
ent?

Film: Chile's Copper -- Mining and Refining in the Atacama, Harry Grubbs
Dist. IFB.

Hacienda, which characterizes one of
-- food supply. Most of the best
ther South American countries, is
states. Not enough of the necessary

Film: Chilean Hacienda.
Distributed by Int'l.
Film Bureau.

S. Draws inferences from a comparison of different map patterns of the same area.

3. Although Chile's transportation system is better than that in many Latin American countries, it needs expansion.

44. Have students compare transportation maps with those of physical features and population density. Where are th largest population clusters? What transportation problems does Chile have? What correlations can be made with these and other maps? These are only a few of the possible questions such an exercise can elicit.

re transportation maps with those of nd population density. Where are the clusters? What transportation probe? What correlations can be made r maps? These are only a few of the such an exercise can elicit.

For a population map, see James, Lat. Am., p. 273. For a map of railroads, see James, p. 52, or Deasy, et.al., World's Nations, p. 257.

BIBLIOGRAPHY ON CHILE

I. For use by pupils

Bianchi, Lois. Chile in Pictures. New York: Sterling Publishing Co., 1965.

Borchert, John and Jane McGuigan. Geography of the New World. Chicago: Rand McNally, 1961.

Gray, William. Exploring American Neighbors. Chicago: Follett, 1960.

Lindop, Edward with Ernest Tiegs and Fay Adams. Understanding Latin America. Boston: Ginn, 1966 ed.

Pan American Union. The Araucanians. Washington, D.C. Pan American Union. (Pamphlet).

Pan American Union. Copper. Washington, D.C.: Pan American Union (Pamphlet).

Pendle, George.. The Land and People of Chile. New York: Macmillan, 1960.

Whittemore, Katheryne, Melvina Svec, and Marguerite Uttley. U.S., Canada, Latin America. Boston: Ginn, 1966.

II. For u

Deasy
Nat
195

Highs
Wor
Cl

James
Yor

LIOGRAPHY ON CHILE

ctures. New
ng Co., 1965.

Guigan. Geog-
Chicago:

ng American
ett, 1960.

Tiegs and
Latin Amer-
ed.

raucanians.
erican Union.

t. Washington,
(Pamphlet).

l and People
llan, 1960.

ina Svec,
.S., Canada,
inn, 1966.

II. For use by teacher

Deasy, George F., et.al.. *The World's Nations.* Philadelphia: Lippincott, 1958.

Highsmith, Richard, et.al., *Case Studies in World Geography*. (Paperback) Englewood Cliffs: Prentice-Hall, 1961.

James, Preston. *Latin America*. New York: Odyssey Press, 1959.

1683
C1

Grade Five
Unit VII: LATIN AMERICA
SUB-UNIT : CASE STUDY ON CUZCO

RESOURCE UNIT

These materials were developed by the Project Social Studies Curriculum Center of the University of Minnesota under a special contract with the Cooperative Research Division of the United States Office of Education. (Project HS-045).

1968

OBJECTIVES

This unit should make progress toward developing the foll

GENERALIZATIONS

1. Location is a position which sets a phenomenon at a specific point on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.

2. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

   a. Temperature is affected in part by elevation; air is cooler at higher elevations than at lower elevations if latitude and distance from the sea are the same.

   b. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.

3. Rainfall is affected by distance from bodies of warm water, ocean currents, wind direction, temperature, and phy
carrying moist

4. Grass will gro
cold for trees

5. Man uses his p
his cultural v
technology.

   a. A number of
   tures, natu
   and history
   patterns.

      1) Men carr
      than in
      in mounta
      where cl
      people t
      lands.

   b. The topograp
   tations, giv

      1) Terracing
      steep slo
      erosion.

   c. Irrigation m
   on land whic

OBJECTIVES

ogress toward developing the following:

on which sets
ecific point
ce, usually
tract grid and
f latitude and

ted by the dis-
or, elevation,
ater bodies, o-
iling winds, and
ich block winds
ons.

fected in part
Is cooler at
than at lower
itude and dis-
a are the same.

easonal differ-
d in part by
equator; tem-
re smaller near
further away

by distance
water, ocean
tion, temper-

ature, and physical features which block winds carrying moisture.

4. Grass will grow in some areas which are too cold for trees to grow.

5. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

   a. A number of factors--climate, surface features, natural resources, accessibility, and history--affect settlement and growth patterns.

      1) Men carry on more activities on plains than in hills and more in hills than in mountains except in the low latitudes where climate at lower elevations leads people to seek cooler areas in the highlands.

   b. The topography of a region may present limitations, given a specific level of technology.

      1) Terracing enables man to grow crops on steep slopes and also slows down water erosion.

   c. Irrigation makes it possible to grow crops on land which otherwise would be too dry.

6. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

7. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

8. Ways of living differ from one society to another.

   a. People in different societies differ as to how they expect people to act and as to what they think good and bad.

9. Although culture is always changing, certain elements or traits may persist over long periods of time.

   a. Some values are conducive to change; some make planned change difficult.

   b. Change in one aspect of culture brings about changes in other aspects.

10. Education affects the quality of labor and so labor productivity.

11. Tools and machines may bring about

g

SKIL

1. S

2. I

3. D

4. U

5. I
k

6. L
m

7. A
g

8. T

ATTI

1. A
t

2. I
c
t
l

3. I
s

w up if they
are needed
nity or for
on.

ne or more
e core area
ut there
here bound-
different

om one so-

ocieties.
expect peo-
what they

ys changing,
ts may per-
f time.

cive to
nned change

of culture
in other

ality of
ctivity.

ring about

greater output per worker.

SKILLS

1. Sets up hypotheses.
2. Interprets graphs.
3. Draws inferences from tables.
4. Uses atlas index to locate places.
5. Interprets map symbols in terms of the map key.
6. Looks for points of agreement and disagreement among different sources of information.
7. Applies previously-learned concepts and generalizations to new data.
8. Tests hypotheses against data.

ATTITUDES

1. Appreciates and respects the cultural contributions of other peoples.
2. Is sceptical of the finality of knowledge; considers generalizations and theories as tentative, always subject to change in the light of new evidence.
3. Is committed to the free examination of social attitudes and data.

OBJECTIVES

S. Uses atlas index to locate places.

G. Location is a position which sets a phenomenon at a specific point on the earth's surface, usually designated by an abstract grid and described in terms of latitude and longitude.

S. Applies previously-learned concepts and generalizations to new data.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Temperature is affected by the distance from the equator, elevation, distance from warm water bodies, ocean currents, prevailing winds, and physical features which block winds from certain directions.

G. Temperature is affected in part by elevation; air is cooler at higher elevations than at lower elevations if latitude and distance from the sea are the same.

G. Temperature and seasonal differences are affected in part by distance from the equator; temperature ranges are smaller near the equator than further away from it.

OUTLINE OF CO

I. The Andean
the region
in the sou
separated
gorges.

A. Cuzco i
sea lev
ficult
they ar
altitud
of agri

B. Cuzco is
of its h
variati
of year
greater
from one

locate places.

on which sets
ecific point
ce, usually
tract grid
ms of latitude

earned concepts
to new data.

inst data.

ted by the
uator, eleva-
warm water
ts, prevailing
features which
tain directions.

ted in part by
oler at higher
ower elevations
ance from the

onal differ-
n part by
uator; tem-
smaller near
ther away

OUTLINE OF CONTENT

I. The Andean Indian culture can be illustrated by the region around Cuzco in Peru. Cuzco is located in the southern highlands of Peru in a broad basin separated from other valleys and basins by deep gorges.

   A. Cuzco is at an elevation of 11,380 feet above sea level; such elevations make it fairly difficult for people to work hard, particularly if they are unaccustomed to these altitudes. The altitudes also affect temperatures and so types of agricultural production.

   B. Cuzco is not far from the equator but because of its height has low temperatures, with little variation from one month to another, one time of year to another; temperature variations are greater from one time of day to another than from one month to another.

1. Have pupils use an atlas index to locate Cuzco and note its latitude. What would they expect temperatures to be like? Now have them examine a temperature chart. How can they explain the temperatures which actually exist in this area?

to locate Cuzco and note
expect temperatures to
a temperature chart. How
es which actually exist

MATERIALS

Atlas.
Map of South America and of Peru.
"Student Almanac."

G. A number of factors -- climate, surface features, natural resources, accessibility, and history -- affect settlement and growth patterns.

G. Men carry on more activities on plains than in hills and more in hills than in mountains except in the low latitudes where climate at lower elevations leads people to seek cooler areas in the highlands.

S. Applies previously-learned concepts and generalizations to new data.

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Rainfall is affected by distance from bodies of warm water, ocean currents, wind direction, temperature, and physical features which block winds carrying moisture.

C. Cuzco's p
for agric
it is gre

rs -- climate,
natural resources,
history -- affect
wth patterns.

activities on
ls and more in
tains except in
where climate at
eads people to
in the highlands.

-learned concepts
s to new data.

gainst data.

ed by distance
n water, ocean
ection, temp-
cal features
carrying mois-

C. Cuzco's precipitation is not really adequate for agriculture without irrigation; however, it is greater than on the coast.

2. Have pupils examine a physical map and a population ma of Peru. Ask: Why do you think so many of the people live in the highlands? If necessary, have pupils look once more at the location of Peru in relation to the equator and at a temperature map.

3. Have pupils use a physical map to try to predict rainfa in Peru. First, have them look at the coastal region, then the highlands area, and then the Amazon side of th Andes. They should check their hypotheses against a rainfall map.

   a. Ask: Why do you think Peru's coast is so dry when i is close to a large body of water? Have a pupil rea and report on the Peru current, or review from the i troductory section on Latin America.

   b. Ask: Why would the highlands area have more rainfal Have pupils suggest reasons before someone checks in geography text.

ne a physical map and a population map hy do you think so many of the people ands? If necessary, have pupils look location of Peru in relation to the e- emperature map.	Physical map on p. 170 of James, *Lat. Am.* Population map on p. 177 of James.
physical map to try to predict rainfall have them look at the coastal region, s area, and then the Amazon side of the ld check their hypotheses against a	See above or use a wall map. For a rainfall map of S. Am., see James, *Lat. Am.*, p. 40 or Lindop, *Understanding Lat. Am.*, p. 229 or Whittemore, et.al., *U.S., Canada, Lat. Am.*, Pt. II, p. 28.
ou think Peru's coast is so dry when it large body of water? Have a pupil read the Peru current, or review from the in- tion on Latin America.	Lindop, *Understanding Latin America*, pp. 259-60.
the highlands area have more rainfall? ggest reasons before someone checks in a	

S. Sets up hypotheses.

S. Tests hypotheses against data.

G. Grass will grow in some areas which are too cold for trees to grow.

S. Interprets map symbols in terms of the map key.

G. Cities are likely to grow up if they perform functions which are needed by the surrounding community or for a larger functional region.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

G. Ways of living differ from one society to another.

S. Looks for points of agreement and disagreement among different sources of information.

D. Most of
grass an

E. There ar
gion not
are foun

II. We look at
the center

A. About 13
areas of

ses.

s against data.

in some areas which
r trees to grow.

symbols in terms

ly to grow up if
nctions which are
urrounding commun-
rger functional

ysical environment
cultural values,
d level of technol-

differ from one so-
r.

s of agreement and
ong different sources

D. Most of the highlands are covered by bunch grass and scrub bushes.

E. There are deposits of gold and coal in the region not too far from Cuzco; other minerals are found further north in the highlands.

II. We look at Cuzco around 1450-1500 when Cuzco was the center of the Inca Empire.

A. About 13 million Indians lived in the highland areas of the Andes in 1522.

5. Show picture of the highlands area to illustrate soil an vegetation. What kind of vegetation do they see? Why aren't there more trees? What kind of crops might be grown here? Set up hypotheses about crops to test later. Test hypotheses about vegetation against a vegetation map.

6. Show a minerals map of Peru or of the highlands area. Have pupils locate some of deposits close to Cuzco. Ask: What might these deposits mean for any town which might grow up at Cuzco?

7. Show the filmstrip, The Incas, which relates specific aspects of the Inca culture. Discussion during this strip should center on the things which are apparently most important to the Inca people: agriculture, social structure, religion, etc. Always ask for comparisons with our way of life.

8. Have pupils read about life in Peru under the Incas. Or have a group of children give a report. Compare the findings with the filmstrip which the class has just seen.

nds area to illustrate soil and vegetation do they see? Why What kind of crops might be ses about crops to test later. tation against a vegetation	Vegetation map in James, Lat. Am., p. 174; Lindop, Understanding Lat. Am., p. 246; Gray, Exploring Am. Neighbors, p. 161.
u or of the highlands area. deposits close to Cuzco. osits mean for any town which	Simple map in Gray, Exploring Am. Neighbors, p. 156. See also Kohn and Drummond, World Today, p. 272 and James, Lat. Am., p. 176.
cas, which relates specific as- Discussion during this strip s which are apparently most im- : agriculture, social struc- ys ask for comparisons with our	Filmstrip: The Incas.
e in Peru under the Incas. Or ive a report. Compare the find- ich the class has just seen.	Bleeker, The Incas; Burland, Finding Out About The Incas; Pan American Union, The Incas; Stirling, et.al., Indians of the Americas, chs. 13-15.; Baumann, Gold and Gods of Peru; Gray Exploring Am. Neighbors, pp. 149-153.

A. APPRECIATES AND RESPECTS THE CULTURAL CONTRIBUTIONS OF OTHER PEOPLES.

G. Terracing enables man to grow crops on steep slopes and also slows down water erosion.

G. Irrigation makes it possible to grow crops on land which otherwise would be too dry.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Tests hypotheses against data.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

A. APPRECIATES AND RESPECTS THE CULTURAL CONTRIBUTIONS OF OTHER PEOPLES.

G. The topography of a region may present limitations, given a specific level of technology

B. The Incas h
made possib
racing.

1. The Incas
but also
as beans

2. The Incas
alpaca a
and for

3. The Inca
groups i
Andes; t
foot run
empire.

B. The Incas had developed intensive agriculture made possible by extensive irrigation and terracing.

1. The Incas raised maize as their basic crop but also grew potatoes, a few vegetables such as beans and squash, and some grain.

2. The Incas had domesticated the llama and the alpaca and used them as beasts of burden and for food and wool.

3. The Incas had conquered many other Indian groups in the Andes and to the west of the Andes; they built important roads for their foot runners to the major areas of their empire.

During the discussion, be sure to emphasize the terracing irrigation, and type of agriculture and the difficulty of terracing without modern tools.

Lists crops as pupils report them. Check back against hypotheses about possible crops. Ask: Does this list support any ofyour earlier hypotheses?

9. Project a picture of a llama. Have a pupil tell the class about the animal and how it can be used even today.

10. Read aloud a brief description of Inca roads and project photos of them. Ask: How easy would it be to build these roads today? How easy would it have been without modern machinery and tools?

e to emphasize the terracing ulture and the difficulty of s.	
hem. Check back against s. Ask: Does this list otheses?	
Have a pupil tell the it can be used even to-	Lindop, Understanding Latin Am., pp. 269-70.
of Inca roads and project y would it be to build ould it have been without	Pan Am. Union, Incas, pp. 16-17.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Sets up hypotheses.

S. Tests hypotheses against data.

A. IS SCEPTICAL OF THE FINALITY OF KNOWLEDGE; CONSIDERS GENERALIZATIONS AND THEORIES AS TENTATIVE, ALWAYS SUBJECT TO CHANGE IN THE LIGHT OF NEW EVIDENCE.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

III. We look a

A. The t
clined
1796.

B. There
this d

1. The
sti
the

2. The
lage
wea
the
to w
Most
but

3. The
find
mean
raci
died
cult

4. The
stoc
intr
tain
brou
crop
for

nvironment
l values,
of technol-

III. We look at Cuzco in 1796.

A. The total Indian population in the Andes declined from 13,000,000 in 1522 to 700,000 in 1796.

t data.

ALITY OF
NERALIZA-
ENTATIVE,
E IN THE

nvironment
l values,
of technol-

B. There were probably a number of reasons for this decline.

1. The Spanish conquered the Incas and substituted their own domination for that of the former Inca rulers.

2. The Spanish parcelled out the land and villages in the form of ecomiendas; this gave wealthy Spaniards the use of the land and of the Indians on it. The Indians either had to work for the landlord or pay him rent. Most of the owners did not live on the land but lived in cities instead.

3. The Spanish forced the Indians to help th find minerals and to work in mines; this meant that the irrigation ditches and te racing were neglected. Also many Indians died doing this work. The intensive agriculture declined.

4. The Spaniards were more interested in livestock production than in growing crops. They introduced cattle herding into the higher mountain grasslands. However, their actions brought a decline in the growing of food crops, and the cattle herding did not make up for the loss of food.

11. Have a pupil make a graph to compare the number of Indians in the Andes in 1522 (an estimate), with the estimate for 1796. What had happened to the population? What might explain this decline?

Read aloud a brief description of the factors thought important by historians. Have pupils discuss their hypotheses in the light of this data.

James, Latin Am., pp. 166-169.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

S. Interprets graphs.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

G. Although culture is always changing, certain elements or traits may persist over long periods of time.

G. People in different societies differ as to how they expect people to act and as to what they think good and bad.

5. The Spanish
areas and p
neglected C
land cities.

IV. We look at Cuzco

A. Today the Indi
risen to 16,00
about 60,000 p

B. The total high
about 60 perce
mestizo, and 1
descent.

C. In the main, In
of the nationa
not locational

1. The Indians
ion from th
it to fit i
and rituals

5. The Spanish began to build up the coastal areas and ports along the Pacific. They neglected Cuzco and most of the other highland cities.

IV. We look at Cuzco today.

A. Today the Indian population of the Andes has risen to 16,000,000; Cuzco itself is a city of about 60,000 people nestled in a valley.

B. The total highlands population is made up of about 60 percent of pure Indians, 35 percent mestizo, and 10 percent of people of Spanish descent.

C. In the main, Indians are isolated from the rest of the national territory. This isolation is not locational alone.

1. The Indians have adopted the Catholic religion from the Spanish, but they have modified it to fit into their older religious beliefs and rituals.

ical environment
ultural values,
level of technol-

.

ea of one or more
res. The core
mogeneous, but
ional zones where
awn between dif-

is always changing,
or traits may per-
riods of time.

nt societies differ
pect people to act
ey think good and

12. Show picture of Cuzco and of Cuzco valley. Ask: Why do you think the people built in the valley rather than up in the high plateaus?

Vall
Inca
Jame
dop,
p. 2

13. Put the population estimate for Andes Indians today on the chalkboard. Compare with the graph made in activity #11. Ask: What has happened to the population? Now show figures for the population of Cuzco alone. Compare with the population of some other towns which pupils have already studied.

14. Make a pie graph to show the composition of the highlands population. Be sure to teach pupils how to read this graph. Now have pupils look at a map of racial composition of S. America. Ask: What group makes up the majority of people in coastal Peru? Do you think these two parts of Peru should be considered different regions?

Jame

15. Have students read a textbook, or other source, concerning the highland region which includes a description of the ways of life, customs, language, habits, and traditions of the Andean Indians. Or have a pupil give an oral report on this topic. Discussion should follow on what difficulties can be expected in bringing about changes in ways of living. In what ways would the Indian have to change in order to better "fit" into the

Lind
Am.,

Cuzco valley. Ask: Why do the valley rather than up	Valley picture in Pan Am. Union, Incas, p. 5; Cuzco picture in James, Lat. Am., p. 188 or Lindop, Understanding Lat. Am., p. 247.
or Andes Indians today on the graph made in activity to the population? Now on of Cuzco alone. Compare ther towns which pupils have	
composition of the highlands pupils how to read this at a map of racial composition- at group makes up the majority? Do you think these two dered different regions?	James, Latin America.
, or other source, concerning includes a description of nguage, habits, and tradi- Or have a pupil give an iscussion should follow on cted in bringing about n what ways would the An- o better "fit" into the	Lindop, Understanding Lat. Am., pp. 270-72.

G. Man uses his physical environment in terms of his cultural values, perceptions, and level of technology.

2. Most of t
the offic

3. Most of t
or differ
Spanish d
Spanish c
no longer

4. Most of t
subsisten

a. The In
and pr
and te
that t
been r

b. Indian
the Eu
and no
in by
llamas
requir
food p
food c

l environment
ural values,
el of technol-

2. Most of the Indians cannot speak Spanish, the official language of the country.

3. Most of the Indians have a different dress or different social customs from those of Spanish descent. Those who adopted the Spanish customs of language and dress are no longer considered Indians.

4. Most of the Indians live in poverty under a subsistence type of agricultural economy.

   a. The Indians continue to grow their crops and process products by the same tools and techniques used in early days, except that the irrigation and terracing have not been restored.

   b. Indians now grow some crops introduced by the Europeans (such as barley and alfalfa) and now have domesticated animals brought in by the Spaniards as well as the Alpaca llamas. However, these additional animals require more pasture which produces less food per acre for herding than for raising food crops.

urban way of life.

Have one half of the class take the part of a city dweller in Lima, and the other half that of a highland Indian village member. Have students write "letters" to each other telling why they prefer their way of life. Read several of these in class. Differences within the country will be brought out.

For Lima
standing
Gray, Ex
p. 154.

16. Show selected frames from the filmstrip, Life in Peru. It brings out the differences in the ways of life clearly and shows how little change has occurred in the life of the highland Indian compared to that of the city dweller. Compare again with our way of life, rural and urban.

Filmstri

17. Compare the agricultural techniques and productivity of the Andean region today and under the Incas. Show the film, Farmers of the Andes: Plateau Agriculture. Or project a photo of Peruvian Indians still working the land with hand plows. Ask: How much would they be able to produce with such tools? With those of our own country? What might be done to improve agricultural conditions in the Andes? (Also show photos of primitive tools for spinning wool still in use.)

Gray, Ex
p. 158;
Lat. Am.

Film: Fa
Int 1. F

take the part of a city dweller f that of a highland Indian vil- 's write "letters" to each other eir way of life. Read several ences within the country will	For Lima, see Lindop, Understanding Lat. Am., pp. 263-64; Gray, Exploring Am. Neighbors, p. 154.
the filmstrip, Life in Peru. ces in the ways of life clear- ange has occurred in the life pared to that of the city th our way of life, rural and	Filmstrip: Life in Peru.
echniques and productivity of d under the Incas. Show the : Plateau Agriculture. Or n Indians still working the : How much would they be able ? With those of our own coun- o improve agricultural condi- show photos of primitive still in use.)	Gray, Exploring Am. Neighbors, p. 158; Lindop, Understanding Lat. Am., p. 246. Film: Farmers of the Andes, Int'l. Film Bureau.

S. Draws inferences from tables.

G. A region is an area of one or more homogeneous features. The core area is highly homogeneous, but there are transitional zones where boundaries are drawn between different regions.

A. IS COMMITTED TO THE FREE EXAMINATION OF SOCIAL ATTITUDES AND DATA.

c. The
of

1)

2)

5. The An
looks
to the

a. The
lan

b. Alt
to t
mine

c. The
are
lang

d. The
the
trus
him.

e. The
spit

bles.

ne or more
he core
us, but
ones where
ween dif-

EXAMINA-
AND DATA.

c. The Andean Indians have a very low level of living.

   1) The Andean Indians have the highest death rates, lowest incomes, highest illiteracy rates, and shortest life expectancies in Peru.

   2) Their food intake consists mainly of potatoes and barley and provides an average of only 700 - 1100 calories per day.

5. The Andean Indians live in a culture that looks inward; they remain unassimilated into the white culture of Peru.

   a. Their loyalty extends only to their family, land, and village.

   b. Although they may travel to a nearby town to trade or may take a seasonal job in a mine, they usually return to their village.

   c. The few Spanish words they may have learned are soon forgotten, since the village language is the ancient Quechua or Aymara.

   d. The Indians harbor deep-seated fears of the white man; in general they do not trust the outsider or even associate with him.

   e. The Indians remain resistant to change despite their low level of living.

18. Give pupils figures to illustrate the level of living of Andean Indians. Compare with figures for the rest of Peru or of people studied earlier in other places.

19. Review what pupils have learned so far about how the Indians live as a sub-culture within Peru. What things do children think these Indians would consider most important? Would pupils still agree that this Andean part of Peru is a region which should be differentiated from the rest of Peru?

20. Have several children role-play a discussion among Peruvian Indians of the Highlands about what they think of the white man and of outsiders in general and about how they feel about changing their way of life. Afterwards, let pupils discuss the ideas brought out. Perhaps let several other children role-play a similar situation, if they think the Andean Indians would react differently.

G. Education affects the quality of labor and so labor productivity.

G. Tools and machines may bring about greater output per worker.

G. Some values are conducive to change; some make planned change difficult.

V. The governmen
to change the

A. Government
assimilati
ments.

1. Educati

2. The Ind
modern

3. The Ind
needs t
methods
tion.

B. Cultural t
night".

1. Althoug
dicated

2. It is di
to a ne

a. Chan
and t
of a
to ma

b. The l
land,
a mea

quality
produc-

y bring
per worker.

ive to
ned change

V. The government faces serious problems in trying to change the way of life of the Andean Indians.

   A. Government leaders must find ways of suitably assimilating the Indians into new environments.

      1. Education is the key focus.

      2. The Indian needs to be taught to use modern tools and to read and write.

      3. The Indian in the traditional village needs to be taught efficient agricultural methods in order to increase food production.

   B. Cultural transitions do not occur "overnight".

      1. Although certain pilot projects have indicated success, the job is only beginning.

      2. It is difficult for the Indian to adjust to a new environment.

         a. Changes in physical setting and diet and the shift from village life to that of a bustling town or city are difficult to make.

         b. The Indian has a deep attachment to his land, even though it provides him but a meager harvest.

Now read aloud, or paraphrase, a description of the reaction of Andean Indians to outsiders and change.

21. Discuss: Should groups within a country be neglected while others prosper, even if they do not wish to change? Why or why not?

Have pupils assume that they would like to bring about changes. Have each pupil assume that he is the President of Peru. He should make a list of things he would do to help the Indians of the Andes in achieving a better life.

Read aloud some of these lists and discuss them.

22. Have each pupil assume that he is an Indian village dweller. He should write an account of his first day in the city. What would be different about the life in the city? Why would it be difficult at first to live there?

Perhaps have a pupil report on Peace Corps workers in the Peruvian highlands or on some other project undertaken to improve conditions.

G. Change in one aspect of culture brings about changes in other aspects.

C. Prospects
populatic
problems
adjustmen

1. More
in the

2. New ro
Indian

3. Many w
for a

ct of culture
es in other

C. Prospects of a doubling in Andean Indian population within fifteen years increase problems but may bring about certain social adjustments.

   1. More Indians will be forced to find jobs in the towns and industries.

   2. New roads and highways will make more Indians aware of the new life.

   3. Many will see increasing opportunities for a better life.

23. Point out the population predictions for the next decade and show a table or graph of caloric intake reported for this region. What problems can be expected if agricultural techniques do not change greatly? What will this force many Indians to do?

BIBLIOGRAPHY

I. Books

Gray, William H., et. al. EXPLORING AMERICAN NEIGHBORS IN LATIN AMERICA AND CANADA. Chicago: Follett, 1960.

James, Preston. LATIN AMERICA. New York: Odyssey Press, 1959 ed. (For teacher.)

Kohn, Clyde and Dorothy Weitz Drummond. THE WORLD TODAY, ITS PATTERNS AND CULTURES. New York: McGraw-Hill, 1963.

Lindop, Edmund with Ernest W. Tiegs and Fay Adams. UNDERSTANDING LATIN AMERICA. Boston: Ginn, 1966 ed.

Pan American Union. THE INCAS. Washington D. C.: Pan American Union, 1964 ed.

Whittemore, Kathryn, et. al., THE UNITED STATES, CANADA AND LATIN AMERICA. Boston: Ginn, 1962.

II. Filmstrip

Life Filmstrips. THE INCAS. 69 Frames, color. Time & Life Building, Rockefeller Center, New York 20.